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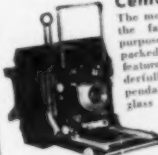
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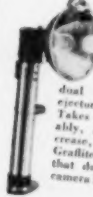
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PURPOSE . . .

SOUND ADVICE for all photographers is given by "Life's" Picture Editor, Ray Mackland, in "National Press Photographer," now received by all members of PSA Photo-Journalism Division. None could be expected to be more direct, practical, unromantic, and realistic than a "Life" picture editor. He, certainly, will endorse photographs which are new, novel, different. He'll put the fuddy-duddy pictorialists in their place, and relegate the salons, with their trite and repetitive pictures, to the ash heap.

"THE PRIMARY function of photography," comments Picture Editor Mackland, "is communication of a message. Pictures should, therefore, say something; tell a story. The great challenge and opportunity of photography is to give significance and meaning to the familiar, the commonplace, the ordinary. Qualities which we should hope to find in photographs include honesty, imagination, vision, taste, sensitivity, and, especially, integrity. A photographer's pictures should express his personality. They should have a style unlike the imprint of any other photographer."

WHAT is this picture editor saying? Ignore garbage cans with their potent meanings? Photograph both sides of the railroad track? Exercise taste, indulge sensitivity, employ vision, unleash the imagination? Photograph the familiar, the commonplace, the ordinary? Express the personality of the photographer?

IN A SENSE, Editor Mackland's words comprise the Magna Charta of the photographer, amateur or professional. Here is an invitation, even an urging, for the photographer to photograph whatever he pleases in whatever way he pleases for results which please him. This is the way to genuinely creative effort.—V.H.S.

PSA CONVENTION

Detroit, Michigan, October 10-13, 1951

PSA JOURNAL, Vol. 16, Dec. 1950

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NEWS AND NOTES

Rochester Convention

Plans are under way for a PSA Regional Convention to be held March 2, 3, 4 in Rochester, New York. At least 400 persons are expected to assemble from these and other points: Cleveland, Detroit, Cincinnati, Baltimore, New York City, Philadelphia, Pittsburgh, Toronto, Chicago, and Buffalo.

The three-day event will coincide with the opening of the Rochester International.

Friday morning, March 2, will be devoted to registration. The afternoon will feature trips to several well-known Rochester plants including the Wollensak Optical Company, Bausch and Lomb Optical Company, Graflex Incorporated, and Kodak Park.

Part of the Technical Exhibit shown at the PSA Convention in Baltimore in October will be on display at Memorial Art Gallery Friday evening. It will feature the Travelling Print Show made up of selected prints from the 1950 Sixth Open Exhibition of Technical Photography. It is expected also that a speaker who is prominent in the world of photography will address the Friday night gathering at the Gallery.

Saturday morning and afternoon, March 3, will feature an extensive program of

clinics, talks and demonstrations. A banquet is scheduled for Saturday evening.

A field trip will take place on Sunday morning, March 4.

The Rochester Technical Section will provide the program for Sunday afternoon and evening. Dr. Louis K. Eilers, of Kodak Park, is the program chairman for the Sunday sessions. An early announcement from Dr. Eilers revealed that among the Sunday speakers will be Ralph Evans, APSA, superintendent of the color control department at Kodak Park, on "Derivations from Color Photographs," and John Dessauer, APSA, of the Haloid Company on "Recent Developments in Xerography." The programs of the Rochester Technical Section usually feature three afternoon speakers, a buffet supper and an early evening speaker. The complete program remains to be announced.

It is hoped that persons attending the convention will plan to visit the George Eastman House which offers exhibits covering the history and progress of photography. This photographic center, housed in George Eastman's former home, functions as an independent institution chartered by the University of the State of New York as a non-profit, educational corporation. Here the growth of photography may be seen in exhibits ranging from the apparatus needed to take a daguerreotype a hundred years ago to the most modern miniature cameras. Exhibits show also portraits made with exposures measured in minutes to action photographs taken in the 100,000th part of a second. Other exhibits are concerned with motion pictures, color photography, camera design and the modern uses of photography in science, industry, the graphic arts, medicine, television, and the daily press.

Howard E. Smith, of Kodak Park, is chairman of the regional meeting. Extensive committees are working with him to assure a program of interest and value. Further details will be outlined in the next issue of PSA JOURNAL.

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If it is, one of your officers should contact the newly appointed chairman of the PSA National Lecture Program Committee, Jack Clemmer, Box 548, West Richfield, Ohio, for information as to what speakers are available and how an engagement may be arranged.

Tours are currently being arranged for two speakers and others will be available later. David Darvas, APSA, is expected to start on a tour late in February visiting Pennsylvania, New York and New Eng-



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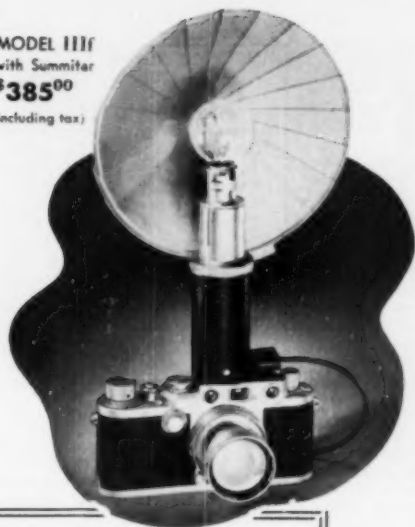
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land; thence southward through New Jersey, Maryland, Virginia, North and South Carolina, Florida, Georgia and Alabama. He will probably complete his tour going through Mississippi, Tennessee, Kentucky, Illinois, Michigan and Indiana.

The second lecture tour will feature Barbara Green, APSA, and it is expected she will begin speaking to clubs a short time after Dave Darvas. Any club interested in having her appear before its members should contact the National Lecture Program Committee immediately.

The National Lecture Program plans in future issues of *PSA JOURNAL* to give a biographical sketch of the different speakers together with a brief description of their program.

The high calibre of speakers offered by the PSA through its National Lecture Program and presented by local camera clubs or councils can be a potent factor in building goodwill and membership for both the PSA and the local sponsoring group, providing that the presentation is properly publicized and efficiently handled. Information and suggestions will be provided by the National Lecture Program Committee upon request, so that a successful and pleasant program may be presented.

Exhibition Records

With this issue the *PSA JOURNAL* is inaugurating a current exhibition participation column depicting the records of the more prolific exhibitors, as of the middle of October.

Twenty-seven open photographic exhibitions allowing a maximum entry of 4 prints per person and hanging more than 125 prints have been held and have published catalogues since July 1, 1950. They are: Port Talbot, South Shields, Memphis, Dixie, Edmonton, Asheville, Calgary, Illinois State Fair, Hartford, Sacramento, Midland, Falmouth, Denmark, Vancouver, Western Ontario, Puyallup, Oklahoma City, Milwaukee, PSA, Antwerp, Royal, San Sebastian, Sao Paulo, Focus, Bath, Cape of Good Hope and Edinburgh.

The following exhibitors have had twenty or more prints accepted:

| Name | Country | Exhibitions | No. of Prints |
|----------------------|-----------|-------------|---------------|
| Frank J. Heller | USA | 27 | 75 |
| Eleanor Parke Curtis | USA | 22 | 62 |
| Harry Wadlie | Canada | 22 | 61 |
| Boris Martha Weber | USA | 21 | 57 |
| Jack Wright | USA | 20 | 54 |
| H. R. Thornton | England | 18 | 50 |
| T. R. Brinson | USA | 19 | 46 |
| G. L. Weissenburger | USA | 20 | 45 |
| A. R. Casaco | Portugal | 22 | 42 |
| Eugenia Buxton | USA | 22 | 41 |
| Alfred Watson | USA | 21 | 41 |
| Charles Manier | USA | 18 | 39 |
| J. Orlie Echague | Spain | 12 | 35 |
| J. W. Galloway | Canada | 15 | 35 |
| Charles Wilson | USA | 15 | 34 |
| H. W. Wagner | USA | 16 | 34 |
| Francis C. K. Wu | Hong Kong | 13 | 33 |
| Helen Manzer | USA | 13 | 31 |
| Jose Ottilia Filho | Brazil | 15 | 30 |
| Erno Valus | Hungary | 10 | 29 |
| Karl Pollak | England | 8 | 28 |
| Boris Dobro | USA | 11 | 28 |
| L. Miller | USA | 12 | 27 |
| Tibor George | Hungary | 13 | 27 |
| Axel Bahnsen | USA | 11 | 26 |
| M. M. Deaderick | USA | 9 | 26 |
| J. Benjamin | England | 10 | 25 |
| M. Tilden | USA | 14 | 25 |
| Ezra W. Brown | USA | 10 | 25 |

National Lecture Program

David Darvas, APSA, the author of the article, "Gray Scale and Tone Control," is the next lecturer sponsored by the PSA National Lecture Program, to make a tour of the U. S. All groups or camera clubs interested in having Mr. Darvas give his lecture in their town should contact Jack Clemmer, West Richfield, Ohio. The proposed tour will start on the first of March, but the deadline for being placed on the itinerary will be January 15th; all interested, please act at once.

| | | | |
|-------------|---------|----|----|
| K. Pazovski | England | 11 | 21 |
| H. E. Foote | USA | 8 | 20 |

Due to limited manpower, we shall be unable to answer any correspondence in connection with this listing but shall be happy to hear of any mistakes or omissions.

Detroit Slide Show Available for Clubs

A surprise feature of the Baltimore Convention was the "DYNAMIC DETROIT" Color Slide Show with Tape Recording which followed Ralph Gray's movies Thursday night.

For the first time you can see in advance the hotel where you will stay (Book Cadillac Hotel) and the Art Institute where the PSA Exhibitions will be featured. You can see for yourself in color slides the numerous picture possibilities of the several Field Trips planned and so choose the one you like the best for 1951.

All last summer Detroit color slide workers were busily engaged in making this photographic convention preview. So many excellent slides were turned in that four complete slide shows with tape recorded description are available.

These "Dynamic Detroit" sound color

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slide shows are about 18 minutes in length. They are designed to be shown at camera club meetings, salon exhibitions and camera club council meetings all over the United States to publicize the PSA 1951 International Convention.

Aided to the material shown in Baltimore are pictures of some of the Detroit folks who will be your hosts and hostesses and their voices, so you will know them and feel like old friends when you come to Detroit October 10 to 13, 1951.

Be sure your club members see and hear this fine show. Write to J. Elwood Armstrong, 17402 Monica, Detroit 21, Michigan, stating the dates you wish the show and approximately what size audience you anticipate. No charge—only cost is postage to the next club.



KARL A. BAUMGAERTEL, APSA

New Horizons

While we have found that the advertisements of the Eastman Kodak Company are always interesting and informative, their recent advertisement which appeared under the caption used above is so exceptionally thought provoking and timely that we simply must quote it here. It reads:

The more you use color the more exciting it becomes. As exacting and critical as you may be—color will stand up and deliver vast dividends in satisfaction. And the new horizons of achievement it reveals give your photography new meaning, new vitality.

The forty-three words quoted above tell the story so well and contain so much food for thought that there isn't a thing we need add to it or want to change. Think it over.

The Importance of Color

While the manufacturers of photographic material and equipment have long ago realized the importance of color photography, there has been a strange reluctance on the part of many photographic organizations, color camera clubs excepted, to recognize the present importance and, what is even more important, the future of color in photography. For the most part this seems to be a defensive mechanism, a fear that color photography will replace monochrome work in the kind of photography most photographic societies and camera clubs are interested in.

We are not going to be so foolish as to make any claim that monochromatic pictorialism is on the way out, but it will take second place to color in years to come. Actually, color is already ahead in such things as freshness of approach, in its freedom from the inhibitions that so greatly hamper the black and white worker. As far as color slides are concerned, it is a much more convenient form of photography when it comes to transporting and exhibiting either in public or private showings. There have been few exhibition prints



"Looking into the Future." Mr. and Mrs. Lyall Cross of Detroit look ahead from the "gay nineties" to "1951." This automobile cutout with the Detroit skyline enclosed is a replica of the small gummed stickers advertising the 1951 PSA Convention available to you for use on your letters, backs of salon prints, in portfolios, etc. Get yours now. Package of 100 for only \$1.00. Write to Arden W. Small, 15041 Oakfield, Detroit 27, Michigan.

Photo By J. Elwood Armstrong, Detroit

ever made that are as impressive as a really good pictorial color slide properly projected on the larger screens now used.

Thinking that it might be possible that the money value of color film sales even now equalled or slightly surpassed the value of black and white film sold, we polled a great many dealers and to our surprise we found that every dealer reported, not that color film sales equalled black and white film sales, but that the money value of color film sales exceeded the money value of black and white film sales from at least ten to one, in some cases, twenty to one. A poll of interest and attendance records of camera clubs was equally surprising. In almost every case clubs having both color and monochromatic sections reported better attendance and greater interest in color.

In the PSA the Color Division has more than doubled the percentage of PSA members in its ranks. At least 90% of PSA members have some interest in color, and as this interest is constantly growing the Color Division is well on the way towards becoming the largest division in our own Society.

This same condition exists in all of the camera clubs. The most flourishing clubs are the color clubs, a surprising number of which have found it necessary to limit their membership and inaugurate waiting lists. In almost every instance where established monochrome clubs have started color sections, the number of members interested in color are in the majority. A very striking example of the greater interest in color was recently furnished by the attendance records of two lectures held within a thirty day period in San Francisco. One, given by a top-flight monochrome photographer who had plenty to offer his audience, attracted not more than sixty-five people.

PSA JOURNAL, Vol. 16, Dec. 1950



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Sold on an absolute "satisfaction guaranteed or money back" basis.

Carolyn Gusa, Audio-Visual Center, Indiana University writes, in part: "An excellent pictorial record of the volcano activity. Photographically and esthetically it is an outstanding production."

C. Grant Keck, Long Island City, N. Y. says "I believe this is the finest amateur movie film I have ever seen. . . . Your telephoto shots of the lava flow and violent explosions are fine." Sr. Roberto J. Lucca, Caracas, Venezuela writes "Es para mi de gran interes la pelicula suya para conservar el nacimiento del referido volcan, lo cual Ud. ha capatado de manera maravillosa."

L. Stanford Willis, Philadelphia, Pa. "I'm delighted to have PARICUTIN . . . the settings and excellent colorings are outstanding for a dupe."

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By C. H. S. TUPHOLME

276 pages • 262 photographs & figures

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It includes what is being done now and suggests what can be done in the future to make the industrial photographic department one of the most reliable factors in maintaining quantity and quality of production.

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PSA JOURNAL
Kutztown Pennsylvania

The other lecture by a top-flight color photographer and author filled a hall seating 1200 plus a considerable number of standees.

The point we are making is simple. With all of the interest shown in color, too many photographic organizations and too many people in our own organization fail to recognize the importance of color. Color sections are treated like an unwanted stepchild but are tolerated because it is recognized that without the income they bring in, the organization could not exist. Without the interest created by color the club would be dead anyway. Make no mistake. The future of our photography is in color. Any organization that forgets it may find themselves without a future.

Inter-Club Competitions

At the time this is being written, about a month before the first of our current series of National Inter-Club Color Slide Competitions, Supervisor Merle Ewell reports that entries have already been received from 22 new clubs. New states represented are Oklahoma, Oregon, Florida, Tennessee, Louisiana, South Dakota and Maryland. Especially interesting and gratifying are entries received from outstanding clubs of long standing in the monochrome field, such as the Fort Dearborn CC, the Green Briar CC, both of Chicago, the Channel City CC of Santa Barbara, California, and others. This is another clear demonstration that the swing is towards color. Competition should be keener than ever this year and winning one of the number of worth while awards is going to be a real honor.

Competition Judging

Because it tells so very well what should be done by judges of camera club competitions, but is all too often overlooked, we are going to take the liberty of quoting from a letter written by Color Division Committee Member Harry Haines of New York City. Harry writes:

When judging color competitions at clubs in this area, I have been concentrating and giving most of my criticism and advice to those entries which I eliminate in the early rounds. These are the fellows who need help most and, in this group, I have found are many entries from the top-ranking black and white workers. If we can help these fellows to master good technique with the camera, we may succeed in keeping them in the ranks of color workers. If they continue to fall down in club competitions, they may not be able to "take it," and drop out of color activity.

Quite a few of the color judges here are working along these lines. People such as Vic Scales, Helen Manner and Paul Wolf are all doing their share in this direction. As Color Director for the Metropolitan CC Council, I am doing everything in my power to have all judges follow this procedure. If we can give enough constructive advice to the neophytes in color, one day we shall be pleased with our efforts in this direction, since many beginners have excellent possibilities of becoming top workers with proper guidance.

As it may seem odd for Harry to mention helping experienced black and white workers to master camera technique, it should be explained that all too many monochrome workers have gotten into the habit of doing their real picture making when they make their prints, rather than when they make their negatives. Then, when they start working with color and find they have to do their picture making

before they expose their film, they run into trouble and soon learn that color is not the "push over" they believed it to be.

Thank You

As this is the last Color Division column your old Chairman is writing before your new Chairman George F. Johnson takes over, we want to thank everyone for the very splendid support and cooperation given. Especially do we want to thank Blanche Kolarik who has done most of the work in preparing this column for publication and Hubert J. Johnson who has been making up the calendar of exhibitions. To George F. Johnson we extend greetings and best wishes. We hope his term of office will be as happy as ours has been.—K.A.B.

Color Division at Baltimore

This report will be confined to those programs and personalities which were especially Color Division.

Opening the big parade of all-star acts was the showing of the accepted slides from the 1950 PSA International, at the Baltimore Museum of Art. Also on view were the accepted color prints, including the winner of the 1950 Clerk Maxwell Trophy, "Skol," by Thomas Linborg of Minneapolis, Minn. This plus registration filled up Wednesday.

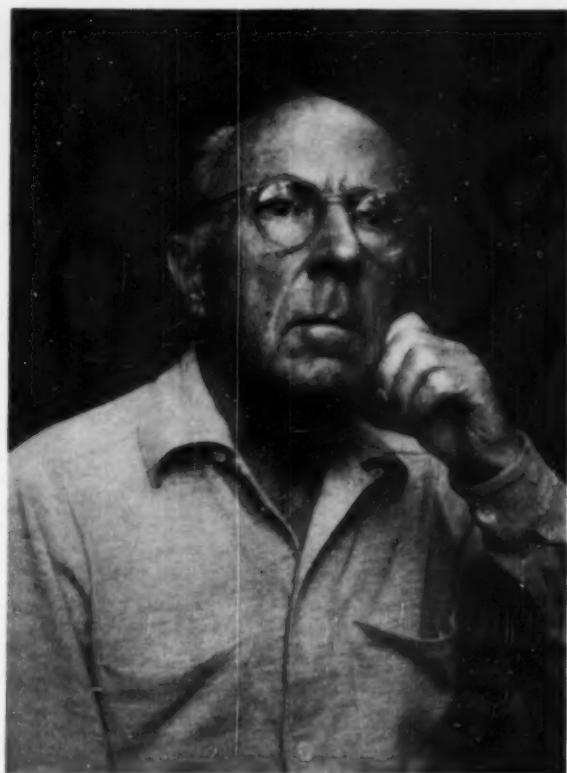
Thursday saw a number of programs of interest to all the members, including the afternoon ride on the sidewheeler, "Latrobe," around Baltimore harbor.

But Friday really produced the CD programs. First on the list was a Color Slide Clinic by George Allen Young, APSA, head of Camera Craft Publishing Company of San Francisco. Slides submitted by members of the audience were discussed, with questions from the floor. After that, Edward A. Hill, APSA, who specializes in Time-Lapse technique in the production of his fine movies, showed "Invisible Motion," that really brought forth the applause. Under your very eyes, you saw dawn break, noontime come, a storm come up and pass, and finally evening and the night. The seasons passed, a bare brown field grew green, flowers blossomed and died. . . . An excellent performance by a master.

A combined CD and Technical Division program, a clinic on Color Photography, Materials, Procedures and Techniques, was a feature of Friday afternoon. With H. Clyde Carlton, APSA, as Moderator, a distinguished panel of experts really gave the subject a thorough going over. Howard Colton, APSA, Harold Harsh, Lloyd Varden, FPSA, and Harry Shigeta, Hon. FPSA, answered questions and gave the answers. Following that, Paul J. Wolf gave a talk, illustrated with slides, on how to get the most out of your slides, as well as making the most of your equipment. At the conclusion of his talk, Mr. Wolf showed a group of salon slides by the late William D. Fuguet, PSA, which included several slides which had won outstanding honors. This group of slides is to be sent to the Camera Club, at London, for circulation throughout the British Isles.

A second showing of the accepted color

PSA JOURNAL, Vol. 16, Dec. 1950



EDWARD WESTON

by Brett Weston

Q. What story lies behind this picture?

A. A story of a great new stride in photography. This unretouched photograph was reproduced directly from Mr. Brett Weston's original $3\frac{1}{4} \times 4\frac{1}{4}$ print made with Polaroid Type 41 black and white film. Taken indoors with naturally diffused light. Exposure: 2 seconds at shutter setting #7.



Brett Weston

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Whether you are an amateur or a professional... beginner or salon exhibitor, visit your dealer and arrange to try this new kind of photography free, at our risk, in your own home or studio.

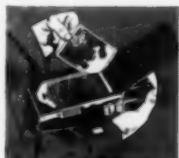
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ENJOY IT! There's no thrill like seeing your pictures on the spot at the very moment they mean the most, while everyone is there to share the fun.



ENLARGE IT! Copy negatives for darkroom use are available for only 15¢ through your camera store. From these you can make your enlargements.



SHOW IT! You will be amazed at the fine quality of enlargements from Polaroid originals. (Your camera store will also make enlargements for you.)

slides from the 1950 PSA International followed, and after a break for dinner, Mrs. Harold L. Medbery, APSA, gave a travel talk, illustrated with slides, entitled "Europe Through the Camera Lens." While the slides were fine, Mrs. Medbery's commentary on her experiences in Europe brought down the house, for it seems that this determined lady meant to get pictures, whether her guides liked it or not. Her success in getting the shots she wanted was amply attested by the generous applause.

Saturday morning opened with Howard E. Foote commenting on an exchange set of English slides. His analysis of color problems abroad and comments on the slides were very interesting, for there were a number of Agfacolors in the set, as well as the more usual Kodachrome and Ansco Color.

This was followed by Frederick A. Tietzel speaking on "Double Exposures and Composites to Tell a Story." This very fine talk gave in full detail the how and why of composites and double exposures, and Mr. Tietzel's ability to explain his methods was put to the test by a flood of questions from the interested audience. The talk was illustrated by slides, many of them well known to those who enter international competition.

Afternoon brought the Color Division luncheon, with 72 members of the Division, including George F. Johnson, CD Chairman, Blanche Kolarik, APSA, Vice Chairman, Paul J. Wolf, Secretary, and H. J. Johnson, APSA, and A. C. Klein of the National Committee, as well as John Mulder, APSA, PSA President and Fred Quellmalz, Hon. PSA, APSA, Editor of the PSA JOURNAL. The luncheon was informal, there were no speeches, and the only formality was to read the list of all those present, and have them, in turn, take a bow. This was the second CD luncheon, and it is to be hoped that there will be many more. This social gathering was initiated at St. Louis last year by A. C. Klein, and he and Mrs. Klein deserve credit for the excellent arrangements.

And speaking of arrangements, mention should also be made of the fine job done by Harrison S. Sayre, of the local committee, who handled Color Division activities. He was largely responsible for all local arrangements, and worked like a trojan throughout the convention to be sure that everything was under control. And this in addition to doing his regular job, at Annapolis. His work paid off in a smooth performance that was a credit to the Division.

Later in the afternoon Mr. Roy Bulger showed a group of slides illustrating "What Makes New England Different from the Rest of the USA." The closing event of the Convention was the Honors Banquet, where many CD members were recognized for their contributions to photography. And, as they said at Baltimore: "Detroit for Fun in '51." See you there—PAUL J. WOLF, APSA

Coming Color Exhibitions

Chicago Nature, Feb. 1-25, deadline Jan. 15. Color section, four slides, \$1. Forms: Blanche Kolarik 3824 S. Central Park, Chicago 23, Ill.



THE GANET

Dr. M. A. Chantler

Minneapolis, Feb. 13-14, deadline Jan. 22. Four slides, \$1. Forms: Warren Anderson, 123 S. 7th Av., Minneapolis, Minn.

Whittier, Feb. 11-25, deadline Jan. 31. Four slides, \$1. Forms: John S. Goodwin, 2028 Howard St., Whittier, Calif.

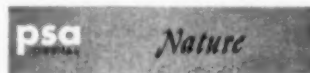
Philadelphia, Mar. 3-25, deadline Feb. 10. Four slides, \$1. Forms: John A. Adams, 346 Putnam Rd., Merion Sta., Pa.

San Francisco (Photoschromers), Mar. 10-17, deadline Feb. 24. Four slides, \$1. Forms: Burton H. Ladensohn, 3140 Clay St., San Francisco 15, Calif.

Reading Rose, deadline Apr. 2. Four slides, \$1. Forms: Blair M. Sleppy, Berks Camera Club, 550 N. 11th St., Reading, Pa.

New York, deadline Apr. 18. Four slides, \$1. Forms: Dr. R. E. Pomeroy, 745 Fifth Av., New York 22, N. Y.

El Camino, deadline May 12. Four slides, \$1. Forms: Merle Ewell, 1422 W. 48th St., Los Angeles, Calif.



LOUISE BROMAN JANSON, APSA

The semi-annual Nature Division color slide competition was judged by Willard H. Farr, Blanche Kolarik, APSA, and Louis W. Braun. The slides included many subjects, but plants seemed to predominate in this contest. These were the winners:

Medal Awards

"The Ganet," by Dr. M. A. Chantler, New Toronto, Canada

"Pussy Willows," by Cyril F. Smith, Dartmouth, Canada

"Columbine," by W. H. Savary, North Plainfield, N. J.

Honorable Mentions

"Tulip Tree Blossom," by E. H. Bourne, Rochester, N. Y.

"Bronx River," by Dr. Richard B. Pomeroy, Scarsdale, N. Y.

"Lord McDougal," by Alfred Renfro, Bellevue, Wash.

"Wild Lupine," by Dr. Frank E. Rice, Chicago, Ill.

"Rippling Sand," by Pearl E. Schwartz, Chicago, Ill.

"Cedar Waxwing & Young," by Al Suter, Chicago, Ill.

"Golden Barrel Cactus," by L. A. Trapp, Toronto, Canada

"Magnolia," by Paul J. Wolf, Hawthorne, N. Y.

Brookfield Zoo Contest

The Nature Division is pleased to announce the winners of the Fourth Annual Brookfield Zoo Photography Contest.

Prizes for the best prints went to: Jack Fields, Loveland, Colo.; Gene Lyle, San Diego, Calif.; and Irving Frederick, Brooklyn, N. Y. Honorable mentions were awarded to: J. Elwood Armstrong, Detroit, Mich.; Joseph Bongratz, Chicago, Ill.; Ray L. Carroll, Elmhurst, Ill.; Dorene Emanuel, Detroit, Mich.; Elizabeth Ernst, Bremerhaven, Germany; Frank A. Fraser, Chicago, Ill.; Ben Hallberg, Brookfield, Ill.; Henry Krull, Chicago, Ill.; Victor A. Lookanoff, Detroit, Mich.; John Marinus, Antwerp, Belgium; F. L. Furrington, Wheaton, Ill.; Raymond E. Shaw, Rochester, N. Y.; and John W. Vienst, Buffalo, N. Y.

Awards for slides were given to: Edward Gray, Buffalo, N. Y.; Alice Stark, Toronto, Canada; and Pearl E. Schwartz, Chicago, Ill. Honorable mentions were received by Frank Bazzoni, Ottawa, Ill.; Esther J. Carlson, Chicago, Ill.; J. Richard Edsall, Marshalltown, Iowa; Willard H. Farr, Chicago, Ill.; Frank A. Fraser, Chicago, Ill.; Lillian Gray, Chicago, Ill.; Loretta Holm, Chicago, Ill.; Mildred Helen Holmes, Oak Park, Ill.; H. W. Hilliard, Steubenville, Ohio; William J. Javurek, Cicero, Ill.; Henry Krull, Chicago, Ill.; Cpl. George B. Morgan, Atlantic City, N. J.; Louis W. Pluta, Chicago, Ill.; Erik Sorensen, Chicago, Ill.; Wes Stark, Toronto, Canada; and C. E. Swink, Villa Park, Ill.

Permanent Collection

After two years of diligent work, members of the Nature Division Permanent Collection Committee have gathered together a fine group of prints and slides. An outstanding job was done by Ruth Sage, secretary of the Division. Other members of the Committee were: H. Lou Gibson, Lawrence D. Hiett, Henry M. Mayer, Louis Quitt, and Louise Broman Janson. The Print Collection is now composed of five sections covering specific nature subjects: Birds, Insects, Animals, Plants, and General Nature Studies. These

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The slide sets are not yet ready for circulation. Contributions are still welcome for consideration. Send your material to Louise Broman Janson, 6252 S. Kedzie Ave., Chicago 29, Ill.

Correction

In connection with the listing of the "Who's Who in Nature Photography" in the October JOURNAL these names should be added:

| | E. | S. | P. |
|-------------------------------------|----|----|----|
| Church, Eleanor B., New York, N. Y. | 2 | 3 | — |
| Gingrich, Audrey, Detroit, Mich. | 2 | 3 | — |

The Prodigious Desert

To a photographer of the Prairie Country the first visit to the Southwest is a marvelous experience. Here, Nature, using a free hand, has created a land of abrupt, angular beauty dwelling upon rugged peaks, gigantic canyons, and vast deserts.

One of the greatest glories of this territory lies in the wonder of its sunbaked deserts. The dominant impression is the immensity of distance. The purple haze of the far horizon is a constant challenge to go on and capture on film all the magnificence and splendor of space. A few such pictures are needed to create the proper mood, but a series of many distant views is disappointing. The novelty of dreamy horizons passes, and you want to come close and see what comprises the real magic of the desert.

Camera equipment needed is the same as in other nature fields. The main requirement is to be able to take both general and closeup pictures. For the most part, a tripod should be used. All accessories should be streamlined to include only the essentials for each excursion, since many of the best places must be reached on foot. After the first five miles, even a normal gadget bag becomes heavy. A cap equipped with a

moveable sun visor beneath the peak is helpful. I made the mistake of wearing an unprotected green sun visor on several outings and was disappointed to find that it had cast a reflection on the backgrounds of a number of closeups. Sturdy high-tops give sure footing through rough terrain and provide a measure of protection against poisonous creatures.

In order to obtain an authentic cross-section of life in an arid region, the medium of color photography is best. Though many dramatic and interesting views are taken in monochrome, the real beauty lies in the rainbow of colors Nature has given her desert children.

Plants and animals which dwell in torrid places exist mainly because they have developed characteristics which enable them to survive the blazing sunlight, drying winds, and long droughts. Each seeks to utilize to the fullest extent the scant moisture, and strives to obtain for itself the habitat best suited to its special needs. Some search for sunlight, others for shade; some select the slopes, others the dry ar-

royos. Collectively, they comprise very interesting subjects for the nature photographer.

The plants most commonly associated with the desert are the cacti. Most of them are armed with a formidable array of sharp spines. Their stems are fleshy and are either ridged, globular, flattened, or columnar. Some are jointed and others continuous. The flowers are showy and bloom in many shapes, forms, and sizes ranging in color from soft pastels to deep hues. Cactus plants are interesting at any time of the season but are fascinating when flowering. The muted tones of the desert are replaced by a spectacular display of colors rivaling the rainbow. The blooming time, depending upon the location of the desert, occurs during April, May, or June.

The desert of southern Arizona is dominated by the fantastic forms of the giant Saguaro. This huge tree-cactus grows in great forests and towers more than thirty feet above the desert floor. Picturesque individuals parade up to the hillsides and wander along the dry water courses. A Saguaro reaches maturity and begins to flower some time after its sixtieth season. Its life span exceeds a hundred years. The columns of this desert dweller are composed of parallel ribs which converge at the tips and are protected by sharp spines. The immense structure of the plant is supported internally by a strong core of rods which are connected by an intricate arrangement of soft tissue. The Saguaro has a shallow root system which is highly efficient in gathering moisture. During a season of plentiful rain the plant can save up sufficient water to last for several years. But if a long drought occurs and the moisture is not replaced, the ridges of the columns shrink and the branches sag downward. Many of the venerable ones cannot bring their branches back to their former positions. Distorted arms bending earthward are gaunt reminders of the grimness of their way of life. But Spring softens the appearance of even the aged and each branch wears a white bouquet of blossoms.

One of the most beautiful effects the desert has to offer is a low sun backlighting the bristling spines of the Silver Cholla. The plant is composed of cylindrical joints which drop at the slightest provocation earning its common name of "Jumping Cholla". The photographer is advised to watch both ahead and behind when working out a composition on the groundglass, for one ill-chosen step backwards can be oh, so painfully embarrassing!

The flat-jointed stems of the Prickly Pear Cactus are so typically a part of arid country that they must be included in every photographic cross-section of desert life. Their thick pads provide the water supply for many small animals. The blossoms are usually yellow and the edible fruit is brightly colored, flaunting shades of yellow, red, or purple.

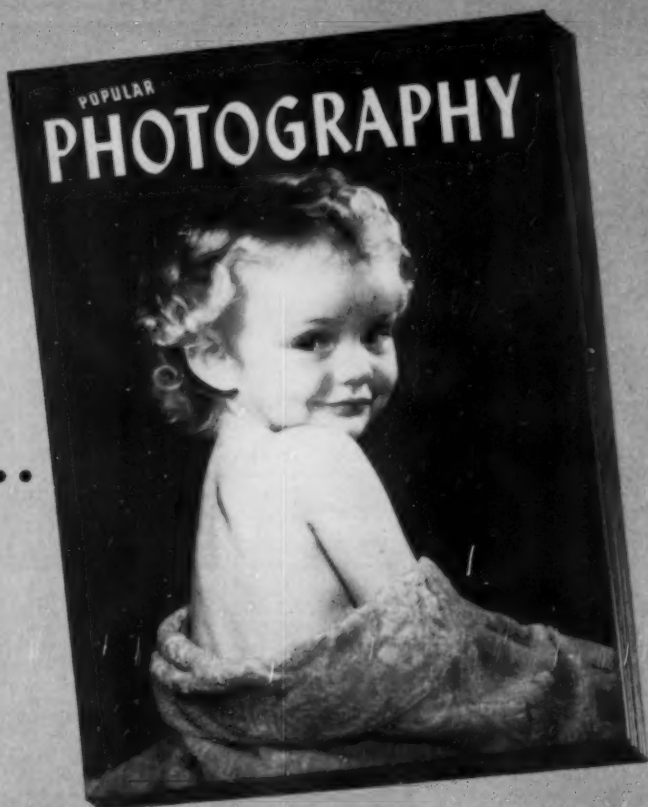
The Ocotillo, though not a cactus, is a distinctive desert plant. Its slim branches spring from the main stem at the ground and attain a height of ten to twenty feet. In winter these slender wands are gray but Spring transforms them to bright green



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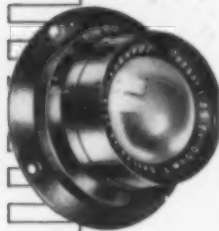
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and places a scarlet torch upon each tip. One of the delightful trees dwelling in this dry land is the Palo Verde. In spring it is completely covered with small yellow flowers that complement the deep blue of the sky. Later, tiny dull leaves occur on the long spines.

Many colorful birds inhabit this territory and their music is a part of the voice of the desert. Some of the favorites are the Arizona Cardinal, the Western Mourning Dove, the Cactus Wren, and the Western Meadowlark. A builder for other birds is the Gila Woodpecker, who follows cavities in the columns of the Saguaro. The cactus, in an effort to conserve its moisture, seals these excavations with heavy scar tissue. Thus, a comfortable apartment is provided for the Elf Owl, smallest member of its clan. The Roadrunner is a picturesque desert dweller. It seldom takes to the air but is seen skimming along the ground in quest of insects, rats, and reptiles. It has a reputation for killing rattlesnakes and accomplishes this feat by teasing its victim into striking until exhausted, then it breaks the reptile's back with powerful thrusts of its bill.

The hot sands are a haven for many curious lizards. Although spiny and grotesque in appearance, the Horned Toad is gentle and harmless, allowing itself to be picked up and handled freely. The Chuck-walla selects crevices among the rocks for its home. It has the power to inflate itself to such proportions that it cannot be extracted from its dwelling even forcibly. Many lizards run across the rough terrain with amazing speed and are, therefore, difficult subjects to photograph.

Desert rodents are admirably adapted to their habitat. The Pack Rat builds a barrier of cholla spines at the doorway of its underground nest. It does not drink water but thrives on juicy cactus, desert fruits, and insects. The Kangaroo Rat is even

more unusual. Never drinking water, it prefers a diet of dry foods. Its existence is made possible by special talents for conserving body liquids. In addition, it does not leave the humid atmosphere of its deep underground nest until nightfall.

The Jack-rabbit has remarkable powers for enduring the intense heat. Unlike the rats and mice, it does not depend upon the protection of an underground home. This speedster of the desert seeks any available shade and gets its water supply from vegetation. The thick pads of the Prickly Pear Cactus are a favorite source of food and drink.

The arid regions are home for many larger animals. Fox, Skunk, Mule Deer, Desert Bighorn Sheep, and Javalinas seek the freedom of far horizons.

Plants and animals have developed specialized powers to exist under the rigorous conditions Nature imposes in her land of scant rains and intense heat. Together, they share the hostility and the hospitality of the arid Southwest.

Coming Nature Exhibitions

5th Chicago. Closes January 15, exhibited February 1st to 25th. Entry forms from Blanche Kolarik, 2824 S. Central Park Ave., Chicago, Ill.
2nd Rose Color Slide. Closes April 2nd. Exhibited April. Forms from Blair M. Sleepy, Berks Camera Club, 530 N. 11th St., Reading, Pa.

BOOK REVIEWS

THE NUDE IN PHOTOGRAPHY, How to Take Better Pictures of the Human Figure, by Lewis Tulchin, Grayson Publishing Corp., 381 Fourth Ave., New York, N. Y., 86 pages, 8 1/2 x 11, illustrated, cloth, \$5.00, 1950.

The author has distilled into this volume the gist of 20 years experience and 800,000 negatives, his camera work with the nude apparently being on the order of a busman's holiday from his photographic

studios in New York and Philadelphia. Tulchin has the artist's approach to photography, and suggests that amateurs who essay to undertake nude photography should get the mechanics and technology in their heads, and then learn to apply the techniques.

The premise is stated in this book that one learns photography of the nude only by doing it. Consequently, Tulchin goes into no minute detail, but paints sweeping strokes with a broad brush. The textual matter is brief and to the point. The illustrations exceed 100, each one designed to reveal some important phase and facet of this complex art.

Early in the book the statement is made that photography of the nude is substantially more than exposing negatives of unclothed women. Tulchin insists that nude photography is both artistic and creative, productive of beauty and of esthetic satisfaction, and, if properly done, expressing the wonder that is life and the beauty that is woman.

The book covers such subjects as intents and purposes, composition, esthetics, posing, lighting, satisfactory negatives, and composition under the enlarger. The author's equipment and methods are simple and sensible. He pretends to no magic, and he insists that only results—which each photographer finally achieves by effort and hard work—really count in the long run.

GAPE, LAND OF HISTORY AND ROMANCE, by Blodwen Davies, Ambassador Books, Ltd., Toronto, Canada, 233 pages, 6x9, cloth, illustrated, \$4.00, 1950.

That peninsula which forms the lower lip of the St. Lawrence River and is known as the Gape has been "discovered" in recent years by hordes of photographers. From its shores to the tops of its Shick-shock Mountains they have found it as interesting as did the Vikings and fishermen who preceded them by some centuries.

Doubtless the photographers have wondered about the Gape while photographing it. In "Gape, Land of History and Romance" they will find many of the answers to their questions, a colorful, brief, modern, and interesting history of the region. There is much more to this book. The author, whether intentionally, virtually maps camera trips for those bent upon creative work. The illustrations, of which there are more than 50, are the work of George Driscoll, APISA, who knows his pictorialism and how to apply it.

The photographer who cannot visit the Gape will enjoy the trip vicariously by reading this book, and the photographer who is going will wish to add it to his equipment. The author takes the photographer along the 558 miles of Gape Road, and nudges him at points where he should wander from the beaten path. She answers his questions: why fishing stations are built that way, what the beachmaster does, how the cod are prepared for market, why Perce is the most dramatic spot on the Atlantic coast, when and where to photograph the Rock, and tell a great deal about the Gaspeians and what makes them tick.

PSA JOURNAL, Vol. 16, Dec. 1950



John S. Rowan, Hon. FPSA

John S. Rowan, Hon. FPSA, Chairman of the Board of the Rowan Controller Company of Baltimore, and publisher of *The Camera Magazine*, died on December 5th after a long illness.

Mr. Rowan was born in Baltimore on October 15, 1888, attended the Baltimore public schools and Diechman's School. He completed his education at Lehigh University, graduating in Electrical Engineering in 1910.

He founded the Rowan Controller Company in 1914. The firm builds oil-immersed industrial motor controls for the chemical industry and hazardous areas, including munitions plants and some of America's largest industries. He was responsible for the development of many devices in the field. He was a Life Member of the Association of Iron and Steel Engineers and a member of the Engineers Club of Baltimore, the Merchants Club, Gibson Island Yacht Club, and the National Electrical Manufacturers Association.

He became the editor and publisher of *The Camera Magazine* in 1942, an outgrowth of his lifelong interest in amateur photography. In that field, he was a member and Past-President of the Baltimore Camera Club, and Past-President of the Photographic Society of America, which bestowed upon him its Fellowship, Honorary Membership, and Honorary Fellowship in recognition of his work in behalf of amateur photographers. The Honorary Fellowship, highest honor of the Society, was presented to him during its October 1950 convention in Baltimore. He is the only person ever to have received the three highest honors from the Society.

John Rowan was one of the organizers and served as first secretary of the PSA Pictorial Division. He was elected President of the PSA in 1941 and continued in office until 1945. It was during these trying years that the foundation was laid for the future growth and success of the Society.

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Photo: Strobe shot by Charles Hoff, N. Y. News



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"This is the first book on press photography," says Richard Clarke, Executive Editor, New York News, "that justifies the word complete." "The Bible of press photography," says the Editor and Publisher. "We plan to use this NPPA book as a text in our advanced press photography class," writes Professor Clifton Edom, of the University of Missouri.

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"You say you wonder why you do not receive much good from your club PSA membership. We have wondered, too."

"For example, the last PSA Camera Clubs Bulletin offered a free assortment of Xmas cards to use in a club program on this subject. Thirty-nine clubs took advantage of this offer. Your club was not one of them."

"In the same issue, an instruction print set was offered western clubs, at no cost. Dozens of clubs scheduled this set. Your club was not one of them."

"In the same issue were entry forms for the national club print and slide competitions (in which each entry receives an analysis). Scores of clubs entered these competitions. Your club was not one of them."

"Sixty-two clubs entered the club bulletin competition (no entry fee required) in which each entry received a free scoring and analysis. Your club was not one of them."

"Several clubs want to exchange print

sets. We have never heard that your club is ready to give something in exchange for something, a print set for a print set."

"The above examples could be extended considerably, into slides, color prints, etc."

"The frankest answer is that your officers are not as alert as officers in other clubs. Since your club will not be spoon-fed, it is necessary for your officers to 'window shop' among the extensive PSA services and select those considered of immediate value to your members. Certainly the latter have cause to complain that their officers are not obtaining for them all that they could."

"Why not decide that henceforth you are going to get your money's worth from your membership? After you get into the swing of it, you'll find it fun, and your members will compliment you on the variety and interest of their programs and activities."

Club Bulletin Competition

Sixty-two bulletins from leading clubs in five different countries were represented in the competition this year. That is an increase of 35% over last year, and tho it meant stiffer competition, it also meant greater significance.

Judges were: Whit Hilmyer, Camera Club Editor of "Popular Photography," H. G. Mitchell, instructor in journalism, and George Rowan, of "The Camera."

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(Turn to page 686)



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Here's red-hot news for all participants in the Drive of Champions.

To those who turn in the greatest number of individual members during the month of January, the following outstanding pictorial pictures by well-known PSA members will be given as awards. Each of these prints is mounted on a 16x20" mount and is suitable for framing by you if you wish to hang it in your home. Each print is signed by the maker and is authentic.

Winners will be chosen on the basis of the largest numbers of new members sponsored by Drive participants and received at PSA Headquarters during the month of January prior to February 1, 1951. Winners will be allowed to choose their prints with first choice going to the person with the largest number of points during the month.

| | |
|----------------------|---------------------------|
| Arthur M. Underwood, | "Lost Horizon" |
| Alexander Leventon, | "En Noir" |
| C. B. Phelps, Jr., | "Drifted Foam" |
| John Hogan, | "Skirting Daisy Jones" |
| | "Locker" |
| David J. Stanley, | "Pattern in White" |
| R. B. LaPelle, | "Ones, Two, Threes" |
| Dr. John P. Benu, | "Dusk" |
| Gottlieb Hamphill, | "Wisteria" |
| Alfred Watson, | "Autumn Ritual" |
| Leon C. Forgie, | "Vista" |
| Anne Pilger Dewey, | "Flight" |
| Paul K. Pratte, | "Eighteen Ninety Three" |
| Aubrey A. Bosline, | "Mainsail - Doris Hamlin" |

Drive of Champions Tally As of November 15, 1950

| State | Name | Points |
|----------------|------------------------|--------|
| District No. 1 | | |
| Maine | None | 0 |
| New Hampshire | None | 0 |
| Massachusetts | None | 0 |
| | Cecil B. Atwater | 1 |
| | Mrs. Ira L. Goding | 1 |
| | Clark W. Goodchild | 1 |
| | Capt. W. H. Greenhalgh | 1 |
| | Ralph A. Hammann | 1 |
| | Franklin I. Jordan | 1 |
| | Mrs. Barbara Standish | 1 |
| Connecticut | Edward Hutchinson | 1 |
| | He. Schwartz | 1 |
| Rhode Island | Paul A. Sperry | 20* |
| | None | 0 |
| District No. 2 | | |
| New York | Bernard M. Acosta | 12* |
| | Perry Atkinson | 1 |
| | Edward L. Bailey | 1 |
| | B. Erie Buckley | 2 |
| | Willard H. Carr | 1 |
| | Earl R. Clark | 1 |
| | R. M. Corbin | 1 |
| | John B. Desauer | 1 |
| | William W. Dewhurst | 1 |
| | Thomas W. Drew | 1 |
| | George Eaton | 1 |
| | Robert F. Edgerston | 2 |
| | Mrs. Franke Fausbender | 8* |
| | Howard E. Foote | 2 |
| | W. R. Franklin | 1 |
| | Richard W. Hein | 1 |
| | Paul J. Kochler | 1 |
| | Norman Lipton | 1 |
| | Rev. Boyd A. Little | 8* |
| | Marge Studio | 1 |

| State | Name | Points | State | Name | Points |
|----------------|-------------------------|--------|----------------|------------------------|--------|
| | R. B. Martenson | 1 | | Belle McMillen | 2 |
| | Hugo Mascher | 1 | | Harry Perry | 2 |
| | Arthur S. Mashiney | 1 | District No. 3 | | |
| | Herbert McDougall | 1 | Tennessee | Miss Eugenia Buxton | 6* |
| | Walter S. Meyers | 1 | | Lester D. Cohn | 1 |
| | Lowell E. Muchler | 1 | | Herbert Jackson | 21* |
| | John G. Mulder | 57** | | Allison V. Slagle | 1 |
| | J. Stanley Nison | 2 | Georgia | C. F. Luce, Jr. | 2 |
| | H. Paschel | 1 | Florida | C. Verne Klintonorth | 1 |
| | Martin Polk | 2 | Alabama | H. Jack Jones | 1 |
| | H. C. Radon | 1 | | Prescott V. Kelly | 45* |
| | Harry R. Reich | 1 | Mississippi | J. M. Endres | 3 |
| | E. G. Sargent | 1 | North Carolina | William A. Ramsey | 1 |
| | V. H. Scales | 21* | | Roy L. Roush | 1 |
| | Fenwick G. Small | 1 | South Carolina | Hugh F. Walburn | 2 |
| | Harold B. Springs | 1 | | | |
| | Silas M. Thomson | 3 | District No. 6 | | |
| | Charles H. Tipple | 1 | Louisiana | Wood Whitesell | 6* |
| | Ruth E. Tromer | 1 | | A. E. Woolley, Jr. | 2 |
| | Dr. E. P. Wightman | 20* | Arkansas | Allan M. Thomas | 1 |
| | Edward C. Wilson | 1 | Missouri | Stuart M. Chambers | 41** |
| New Jersey | Roy J. Bohlen | 1 | | W. E. Chase | 2 |
| | H. R. Caler | 1 | | Martin B. Manovill | 1 |
| | James F. Monteverde | 1 | | Alfred S. Norbury | 1 |
| | George J. Munz | 1 | Kansas | Dr. H. E. Morgan | 1 |
| | H. D. Sheldon | 85* | | C. R. Romstedt | 1 |
| | Dennis A. Simonetti | 1 | Texas | Dan B. Rumpf | 1 |
| | | | | Samuel F. Davis | 2 |
| District No. 4 | | | | Eugene C. Doshne | 1 |
| Pennsylvania | R. S. Beece | 1 | | Paul L. Gitting | 1 |
| | Rev. R. Bienenberg | 1 | | Ralph E. Gray | 13* |
| | Wilson R. Boyne | 1 | | Lloyd L. Gregory | 2 |
| | Philip Cas | 8812** | | Dr. L. L. Handly | 1 |
| | Arlene H. Daniels | 1 | | C. J. Perry | 1 |
| | Dr. Francis A. Faught | 1 | | W. F. Reeves | 1 |
| | Nelson Hutchison | 3* | | Carlos Sandoval | 1 |
| | George F. Johnson | 1 | | F. J. Schmidt | 1 |
| | P. Kissinger | 1 | | CWO Frank I. Yates | 2* |
| | Richard R. Koch | 11** | Oklahoma | G. E. Fiellin | 2 |
| | Mrs. J. McN. Leathem | 1 | | John J. Heller | 3 |
| | S. Miller Mack | 1 | | Frank Long | 1 |
| | Foster Moyer | 1 | District No. 7 | | |
| | F. Quellmaly | 1712** | North Dakota | None | 0 |
| | Jesse Weiss | 1 | South Dakota | E. C. Lunt | 1 |
| | Paul J. Wolfe | 1 | Nebraska | Sten T. Anderson | 1 |
| | Asa L. Young | 1 | | Richard C. Knott | 1 |
| | A. K. Priester | 1 | | Stanley D. Sohl | 4 |
| Delaware | Harold W. T. Purnell | 21* | | Rus Arnold | 1 |
| | Mrs. Caryl R. Firth | 3 | Illinois | Egon Berka | 3 |
| Maryland | Tom Firth | 6* | | Dwight M. Chambers | 2 |
| | Alex G. Potamianes | 15* | | Mrs. Evelyn Chambers | 2 |
| | W. G. Schepleng | 1 | | Dr. Edward Chip | 5* |
| | Oliver C. Shipley | 1 | | Eldridge R. Christhill | 1 |
| | E. V. Wenzell | 2 | | Clifford B. Cox | 1 |
| | Harry B. Shaw | 1 | | Miss Miriam Davey | 1 |
| D. of Columbia | Orlie Atkins | 2 | | Frank Finner Jr. | 1 |
| | William E. Booth | 1 | | Mrs. C. L. Fredrick | 45* |
| | C. C. of Richmond | 3 | | W. Howard Fredrick | 1 |
| | Dr. J. O. Fitzgerald | 1 | | Frank E. Fuller | 1 |
| | T. P. Holt | 9* | | Americo Grasso | 1 |
| | Old Dominion CC | 1 | | A. E. Hjerpe | 1 |
| | Charles C. Peterson | 1 | | H. J. Johnson | 81** |
| West Virginia | Mrs. Louise A. Gettel | 1 | | Robert M. Keith | 1 |
| | | | | Mrs. Blanche Kolarik | 1 |
| District No. 8 | | | | Monte Kopke | 1 |
| Ohio | A. Millard Armstrong | 2 | | Russel Krite | 1 |
| | Axel Rahmsen | 1 | | Lon H. Lell | 1 |
| | James A. Bines | 1 | | Warren W. Lewis | 2 |
| | Frank E. Carlson | 2 | | Mary Matsumura | 1 |
| | R. C. Hakanson | 1 | | Jan Mowat | 1 |
| | E. J. Hobbs | 1 | | Walter E. Parker | 21* |
| | Herbert M. Howison | 1 | | D. A. Pritchard | 2 |
| | Charles M. Kyle | 1 | | Lewis T. Reed | 1 |
| | J. Robert Langlotz | 4 | | James Ridlick | 1 |
| | Edward B. Nowl | 4 | | Evelyn M. Robbins | 1 |
| | P. H. Oelman | 2 | | J. H. Sammis | 1 |
| | Albert M. Simpson | 1 | | Clara Schmitt | 1 |
| | Miss Sidney Thomas | 21* | | Pearl E. Schwartz | 2 |
| | Miss Doris M. Weber | 1 | | Frederick T. Sharp | 1 |
| | Mrs. Irma G. Haselwood | 1 | | J. P. Wahlman | 1 |
| | Mrs. Frank Hoke | 1 | | Rennie I. Weber | 1 |
| | Robert L. McFerran | 2 | | S. P. Wright | 1 |
| | Harvey P. Rockwell, Jr. | 1 | | | 4 |
| Kentucky | French Patterson | 1 | | Mabel Young | 6* |
| | J. Elwood Armstrong | 8* | Iowa | Edith M. Royky | 1 |
| Michigan | Isadore A. Berger | 1 | | Waterloo Camera Club | 1 |
| | Earle W. Brown | 7* | Minnesota | Larry D. Hanson | 18* |
| | Mrs. Jean Elyell | 1 | | Conn H. Iher | 1 |
| | Aubrey Gingrich | 3 | | Vim M. Judd | 1 |



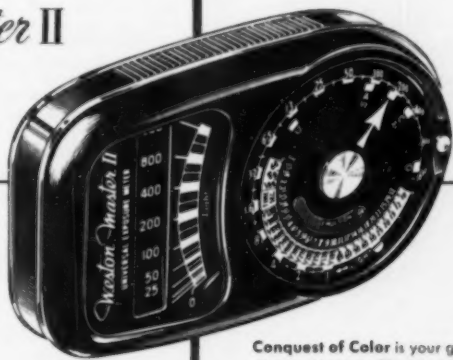
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| State | Name | Points |
|-----------|--------------------|--------|
| Wisconsin | E. A. Byrdsdorfer | 1 |
| | Alan J. Dale | 1 |
| | Dr. Milton L. Kuhn | 2 |
| | Ted Laatsch | 1 |
| | Robert J. Lauer | 5* |
| | Ray Miss | 6* |

| District No. 8 | Name | Points |
|----------------|---------------------|--------|
| Washington | A. M. Kendrick | 4 |
| | Joe Marshall | 4 |
| Oregon | Lafie L. Foster | 2 |
| | C. W. Getzender | 4 |
| Montana | Carlton L. Lingwall | 4 |
| Idaho | None | 0 |
| Wyoming | Dick Harris | 1 |

| District No. 9 | Name | Points |
|----------------|----------------------------------|--------|
| California | Dr. Werner Alexewicz | 1 |
| | A. Appelman | 1 |
| | K. V. Antzen | 3 |
| | Edmond Arthur | 1 |
| | J. Philip Bandura | 2 |
| | John F. Barnes | 1 |
| | Karl A. Baumgaertel | 1 |
| | E. W. Blew | 10* |
| | Harvey W. Brown | 10* |
| | Clyde L. Browning | 1 |
| | W. W. Callow | 1 |
| | M. M. Deaderick | 7* |
| | Boris Dolnos | 29* |
| | Milton Elfron | 1 |
| | Merle S. Ewell | 1 |
| | John Forsythe Jr. | 1 |
| | Harold Gilton | 2 |
| | C. B. Jowett | 1 |
| | John B. Mengel | 2 |
| | Clyde A. Pymman | 1 |
| | Frederick L. Richards | 1 |
| | So. Cal. Council of Camera Clubs | 1 |
| | So. Cal. Sec. TD | 1 |
| | H. A. Thornhill | 4 |
| | Charles L. Wilson | 2 |
| Nevada | None | 0 |
| Utah | Dr. S. Wayne Smith | 1 |
| Colorado | Dr. Max Giescke | 1 |
| | Ray E. Peterson | 1 |
| New Mexico | Henry C. Kyllingstad | 1 |
| Arizona | Bruce Cole | 1 |
| | Lester J. Mahoney | 2 |

| District No. 10 | Name | Points |
|-----------------|----------------------|--------|
| Alaska | Gilbert G. Whitehead | 1 |
| Hawaii | Gilbert H. C. Lum | 1 |
| | David A. Muramoto | 2 |
| | National Photo CC | 6* |
| | Hy Seidridge | 1 |
| Puerto Rico | William C. Ihlefeld | 5* |
| Canal Zone | None | 0 |

| Area I | Name | Points |
|--------|-----------------------------|--------|
| Canada | William B. Bates | 5* |
| | Cing-Mars Benoit | 5* |
| | Raymond Caron | 5* |
| | Dr. M. A. Chantler | 5* |
| | Stanley C. Dakin | 5* |
| | George Fearnley | 5* |
| | J. W. Galloway | 5* |
| | James A. McVie | 5* |
| | New Westminster Camera Club | 5* |
| | Oliver W. R. Smith | 4* |
| | Sam J. Vogan | 6* |
| | Harry L. Waddle | 5* |
| | Walter F. Wood | 5* |

| State | Name | Points |
|-------------|-------------------------|--------|
| Area 2 | | |
| Brazil | Jose Rastelli | 5* |
| Chile | Rudy Hirsch | 5* |
| Costa Rica | Dr. Esteban A. deVarona | 9* |
| Cuba | Angel DeMoya | 5½* |
| | F. Figueroa | 5* |
| Mexico | Gordon C. Abbott | 1 |
| | A. W. Gelbke | 1 |
| Venezuela | Frank J. Delima | 2 |
| Area 3 | | |
| England | Dr. Peter Hansell | 5* |
| Area 4 | | |
| Australia | Max Walton | 5* |
| Hong Kong | Dr. Ernest To | 6* |
| | Francis Wu | 11½ |
| India | K. M. Banerji | 5* |
| | Dr. G. Thomas | 3 |
| New Zealand | Harold A. Larsen | 6* |
| | Maj. Keith R. Mosheim | 5* |
| PSA Journal | | 2 |

* Championship Medal
** Not eligible for higher awards

Camera Clubs

(Continued from page 681)

bulletins and working independently of each other, scored each bulletin. The sheets were then summarized to give the total scores for each bulletin. The score sheets, also containing suggestions from the judges, were sent to each club.

In the "Printed" classification, the Longbeach Camera Guild "Spotlight" was winner of the first award medal, with Atlanta's "News," Metropolitan's "News," and Retlaw's "Retina" immediately following with tied scores. Because of ties, each of these editors received similar medals. The Longbeach club received the plaque; editor was Rosemary Day. (This club was also winner last year.)

In the "Other" classification, the medal winning bulletins were Chicago Color CC's "Projector" first (editor R. B. Horner), Hawthorne's "News" second, and Camera Club of N. Y. "Camera Notes" and El Camino's "News" tied for third. The Chicago Color CC received the club plaque.

Blue ribbons for high "editorial content" group scores were awarded to Science Museum's "Fotomic Facts," Detroit Guild's

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No. 3. Outdoor Photography by D. Ward Pease, APSA.

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"Bulletin," Oakland's "Panoram," Springfield's "Exposures," and Toronto CC's "Focus."

Blue ribbons for high "typographical" group scores were awarded to Cuba's "FotoCine," Manhattan's "Amacam," Dearborn's "Dearbornite," and Springfield's "Exposures." ("Exposures" was only one point short of being a medal winner.)

For high scores in typography components, red ribbons were awarded to the following: Germantown's "Crier," Ridge-wood's "Focal Plane," and Chicago Cinema's "Flash."

For high scores in editorial content components, red ribbons were awarded to the following:

California: "Viewfinder"
New Westminster: "Reflector"
N. Y. Color: "Rainbow"
San Fernando: "Shadowbox"
San Francisco: "Photochrome"
News: "News"
Toronto: "Central Y"
Hi-Lite: "Hi-Lite"
National Photographic Society: "Finder"
Fl. Madison: "Lensman"
Everett: "Viewfinder"
Triangle: "Free Lancer"
Waikato (New Zealand): "Snapshots"
Germantown: "Crier"
Denver: "Photogram"
Tulsa: "Groundglass"
Sierra: "Gammagram"

It is possible that the competition next year will be opened to non-PSA clubs also, with an entry fee required of non-members, but entry free to PSA club members.

The great value of the competition is not so much in the possibility of winning medals as it is in obtaining complete breakdown scores on the five components of a good bulletin, plus written suggestions to improve the bulletins.

OUR COVER

The cover for this issue was selected from the Masters Exhibit of the Photographers' Association of America, now being circulated to PSA clubs by the Pictorial Div.

It was taken for a fashion client by Wesley Bowman, of Chicago—photographer, fisherman, hunter, stamp collector, gardener, yachtsman, home workshop enthusiast.

In 1919, Bowman found himself out of the Army, a nice new discharge in his hand, no job and no money. It wasn't long before he landed himself a job as a photographer's assistant. After six years, he realized he could make good pictures so he set himself up in business. He's been successful ever since. He's never too busy to help the other guy and many a photographer owes his knowledge of fundamentals to Wesley Bowman's unique willingness and ability as a mentor.

PSA JOURNAL, Vol. 16, Dec. 1950

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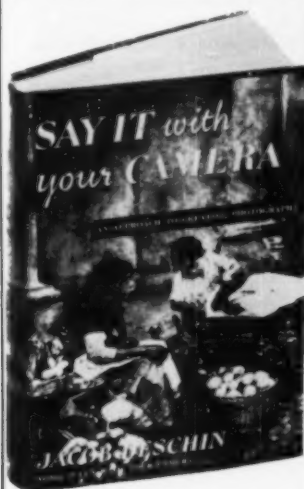
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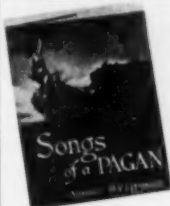
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Books for the Amateur Photographer

D. WARD PEASE, FPSA

A RESEARCH man in charge of photography at an industrial laboratory sought the answer to a certain problem in the well-stocked library of that laboratory. He had some trouble in finding what he wanted. His complaint was that the literature was either quite elementary and presupposed no knowledge of photography, or was very advanced in character and required more background than he possessed for sufficient understanding. He found that there was comparatively little offered at about college textbook level. It was all high school or elementary level, or took a Ph.D. to understand it. As a fellow camera club member he happened to mention his problem to me, and I was able to recommend a good general book at the level required.

This incident suggests one of several ways of classifying the voluminous literature of photography; i.e., as of elementary, high school, college or graduate level. There is another convenient method, one related more to the commonly used classification of the three essential ingredients of a picture: subject or theme, composition and technique.

It has been my observation that good literature on the first two of these essential ingredients is so scant that the other classification of grade level could hardly be applied. That might better be reserved for the vast array of writings on technique.

Before going any farther with the consideration of current photographic literature, it is necessary to call attention to several precautions. The field is so large that it will be impossible to cover it at all completely. I will merely mention a few books or other sources of information which I have noticed and which have impressed me as worthy of recommendation to my fellow photographers. The omission of anyone's favorite, therefore, is probably due to the fact that it just has not come to my attention. And incidentally, all of the books men-

tioned in this article, if still in print, may be purchased from PSA JOURNAL at list price, postage prepaid.

Back of every book is some kind of an author and any writing is going to reflect his personality, abilities and background to a certain extent. In some cases the authors are "big names" in their respective fields. This may or may not be significant. In order for a book to be worth while the author must not only have something to say but be able to say it clearly enough so that it will be understood and interestingly enough so that it will be read under favorable circumstances.

The personality of the author, particularly as it is reflected not only in his way of writing, but also in his photographic background and outlook, must be taken into account. In some cases an author's approach or working techniques are so far personalized as to impair the value of his writings.

As I said before, good books covering the theme or subject of a picture and its treatment, the expression of ideas by photography, are not plentiful. One is outstanding in my estimation, yet unhappily out of print: "Principles of Photographic Pictorialism" by Tilney. If you can find a copy to borrow, it will prove interesting to glance through. This is really a book for leisurely study and contemplative digestion, one to turn to from time to time for refreshment of ideas. Of more recent publication and quite good in this field, although not nearly so extensive in its coverage, is L. Whitney Standish's "Making Effective Photographs." The emphasis is on the pictorial viewpoint and much help is given on how to develop and make the most of it. An entirely different background, that of a magazine illustrator, is readily apparent in those portions of "Feininger on Photography" which treat of the handling of subject matter.

In addition to books on the subject, one of the best sources of ideas on handling the theme or idea content of pictures is to be found in pictures themselves. An excellent place to find examples which have been selected for outstanding merit is in the magazines and annuals devoted to the types that interest you. If in the text accompanying these illustrations there is a commentary or evaluation beyond the usual title or caption, so much the better.

Probably the outstanding book on composition for photographers available today is Eleanor Parke Custis' "Composition and Pictures." This is another book of the type which is not meant to be read like a novel, but studied through and referred to from time to time. My own personal reaction is to commend highly the chapter "Take It Easy" and suggest that "Dynamic Symmetry" be not taken too seriously. Standish's book mentioned previously has some excellent material on composition included in the picture analysis scheme that he gives. Another book presenting a study of composition in a highly organized and rather personalized fashion is Nicholas Haz' "Image Management." You may find that the approach used there is just the one that will best give you what you want.

It is when we get to the literature on photographic technique that we encounter enough in volume and variety to justify the grading suggested in the opening paragraphs. As might be expected, the literature aimed at the more elementary, or what might be called the high school text level, makes up the greatest bulk. New general texts of this type are being announced continually. Perhaps I might be excused if I pass them by with the comment that many of them are excellent in their intended field. A proper survey would take more space than the editor would be willing

to give here. Look them over in book or camera store, or in a friend's home, and see if they cover the particular phase of photography in which you are interested.

One way to be sure that a book contains the material in which you are directly concerned is to get one devoted to that subject alone. In the past there have been several related series of such books. The current collection which covers more titles than any other is the "Little Technical Library." Those I have had an opportunity to become acquainted with have been well worth their modest cost. Some of them are rather out of the elementary text class, not so much in the difficulty of comprehension as in the breadth and depth of the coverage of their field, such as "A Glossary for Photography" by Frank Fenner, "Making Your Pictures Interesting" by Earl Thiessen and "Advanced Flash Photography" by Rus Arnold. There may be others in the series equal to these.

Another form of book for a definite or limited field is the "Guide" for a specific camera. One of these, "Graphic Graflex Photography" edited by Morgan and Lester, spreads beyond the specific cameras listed to offer knowledge of value to any user of one of the larger types of cameras. Quite comparable in its field is the Eastman Kodak Company's "How to Make Good Movies," which has gone through innumerable editions in keeping up to date and is indispensable to the movie maker.

When we get to the college text level, you may be wondering which book answered the need described in the opening paragraph. It was "The Photographic Process" by Mack and Martin and stands almost alone in its class. There are a few other books which for one reason or another might be considered as being of comparable level. In the general coverage class there is one book to be mentioned here, although it was hardly written as a text for a college course in photography. This is "Feininger on Photography."

In the group of books on a specific phase of picture-making any number are of this advanced type. They are the kind of book that one who is or

aspires to be an advanced amateur or a better professional photographer can own, read and refer to frequently with profit. "Fred Archer on Portraiture" certainly falls in this class.

Another example would be "Kodachrome and Ektachrome From All Angles" by Fred Bond. Ansel Adams' new series of "Basic Photo" texts individually fall in this grouping. Collectively, when the series is complete, they may constitute a good general text. There is much of Mr. Adams' personal approach evident, which may enhance or impair his message, depending on how you look at it. One of the series, No. 3, "The Print," is an example out of one category of photographic books about which I have heard as much discussion as any that comes to mind. Others on print-making always mentioned favorably are Lootens' "Photographic Enlarging and Print Quality" and Jordan's "Photographic Enlarging." A newcomer which I believe is fully qualified to stand beside these older books is Morris Gurrie's "Complete Book of Enlarging." It is right up to the minute on the newer techniques.

Now we come to the graduate school, the Ph.D. class of books. Tops here would probably be "The Theory of the Photographic Process" by Dr. C. E. K. Mees, Hon.FPSA. Others would be "History of Color Photography" by Joseph S. Friedman and "The Principles of Optics" by Hardy and Perrin.

One class of books remains to be mentioned, the reference books, those taking the place of the encyclopedia in general knowledge. Several in this group which deserve mention are: "Photography: Its Principles and Practice" by C. B. Neblette; "Photography: Theory and Practice" by L. P. Clerc and "Handbook of Photography" edited by Henney and Dudley. Others, less thorough in coverage but still in the reference class, are the "Kodak Data Book"; the "Photo-Lab Index" compiled by Henry M. Lester; and "Photographic Chemicals and Solutions" by Crabtree and Matthews. I mention the latter in spite of the fact that it is out of print because nothing else has appeared to fill its place. How about

a new edition? Still another is "Photographic Facts and Formulas" by E. J. Wall, revised and largely rewritten to keep it up to date by F. I. Jordan.

I suppose that covers about everything except a proper bibliography, such as an experienced librarian would compile. That will be found in *PSA JOURNAL*, Vol. 15, No. 3 (Mar. 1949, p. 161), "The Darkroom Bookshelf" by Margaret L. Peters. Some of the books I have mentioned are included in that listing, some are not, and some I list have been published since it was compiled. There are also many books described and listed there that I have overlooked or omitted. Such a listing as this can be as highly personalized as one's approach to photography, something that should be understood in evaluating this listing or Miss Peters' bibliography or anyone else's selection of a book or article.

It should be remembered that techniques and thought in photography in general are continually changing, and one way to keep up with them is by constant reading, in books or periodicals. It should also be remembered that reading is no substitute for experience and that not all points are specifically covered in books.

This reminds me of an incident somewhat apropos based on the fact that I once taught two different evening sessions of the Fort Dearborn Camera Club school. The wife of one of the local ardent amateurs sought to escape darkroom widowhood by getting into photography herself and enrolled in that school. She came home from the first of my two lectures with the statement that I had announced that at my next lecture I would explain how to separate double exposures! (I can't remember saying it, but I suppose I could have.) Her husband said that it could not be done and set out to prove it by the book, and he had a good library to call upon. Some hours later he gave up without the matter being settled. They are both still good friends of mine, but have you ever seen a statement in any book to the effect that you cannot separate double exposures?





Camellia Mathotiana by Jack Roche, PSA. Courtesy Flower Grower Magazine.

From Hypothesis to Hypo

AXEL BAHNSEN, APSA

Art—an attempt by an individual to communicate with men in order to evoke a meeting of minds.

THE FAILURE to understand fully the implications of the above statement may well be the cause of the present confusion in photographic circles. To become fully effective with the photographic medium requires little effort provided the inner motivation has been developed in terms of personality adjustment to the science of photography.

Camera clubs lacking the understanding and leadership to develop the individual in terms of himself cause considerable harm, often resulting in a lack of originality and the prevalence of imitative compositions in the general output of pictures by members.

The program chairman might find it profitable for the club members to consider a course in "psychiatric therapy in the art of seeing," or a series of sessions in group dynamics. (This, of course, depends on whether or not the members are willing to attend such a series.)

Even a lecture by a psychiatrist on human behavior might be profitable. I feel the results would be a better understanding of the complexities of individual behavior. With that will come tolerance, good fellowship, and better pictures.

There is no simple equation for developing an approach to picture-making that is different. I have tried, over a period of ten years of teaching, to find a method of giving my students an approach that would permit them to see things objectively, and then to inject ingredients of personal experience tempered with an understanding of themselves. How can we hope to express ourselves if we don't take time out to explore the all-important ego?

It is all too easy when teaching to be dogmatic and satisfy the clamor for "How do you do it?" One often discovers that he has given birth to a litter of bastard brain children. They are neither his—though the resemblance is there—nor the students'—though the fingerprints are theirs.

Those who have studied with various masters and at schools around the country invariably carry with them the stigma of their teachers. Their efforts and their failures are mute testimony to the fallacies of present teaching methods in photography. Some of the techniques of group dynamics could well be studied and applied to camera groups. I have tried some of them in a limited way and I have been surprised at the results and the ease with which the individual progresses—once he has overcome his complexes.

PSA JOURNAL, Vol. 16, Dec. 1950

Color Photography of Flowers

JOHN R. WHITING, APSA

OF ALL the subjects in the world that have ever come before the camera, plants and flowers are the ones that most cry out for color film. Consider the natural world, and the man-made world: there is color in even a grey dawn, or a white concrete dam. There is color in a stage setting, or a city, or a golden-skinned woman. But if there is one kind of photograph that calls for the photographer's skill in catching brightness and subtlety, texture and hue, delicacy and fire, it is a portrait of a garden.

The men who photograph flowers epitomize the problems of all photographers: their technical skill must be superb, and their mastery of their subject must be unquestioned.

Jack Roche, Sam Gottscho, and Fred Cassebeer are three of the best-known camera workers in this field. With J. J. Simpkins, another expert, they took the photographs reproduced in this issue of PSA JOURNAL. (It is through their courtesy, and the assistance of Theodore Weston, editor, and J. Donald Harrison, production manager of *Flower Grower Magazine*, that these reproductions were prepared.)

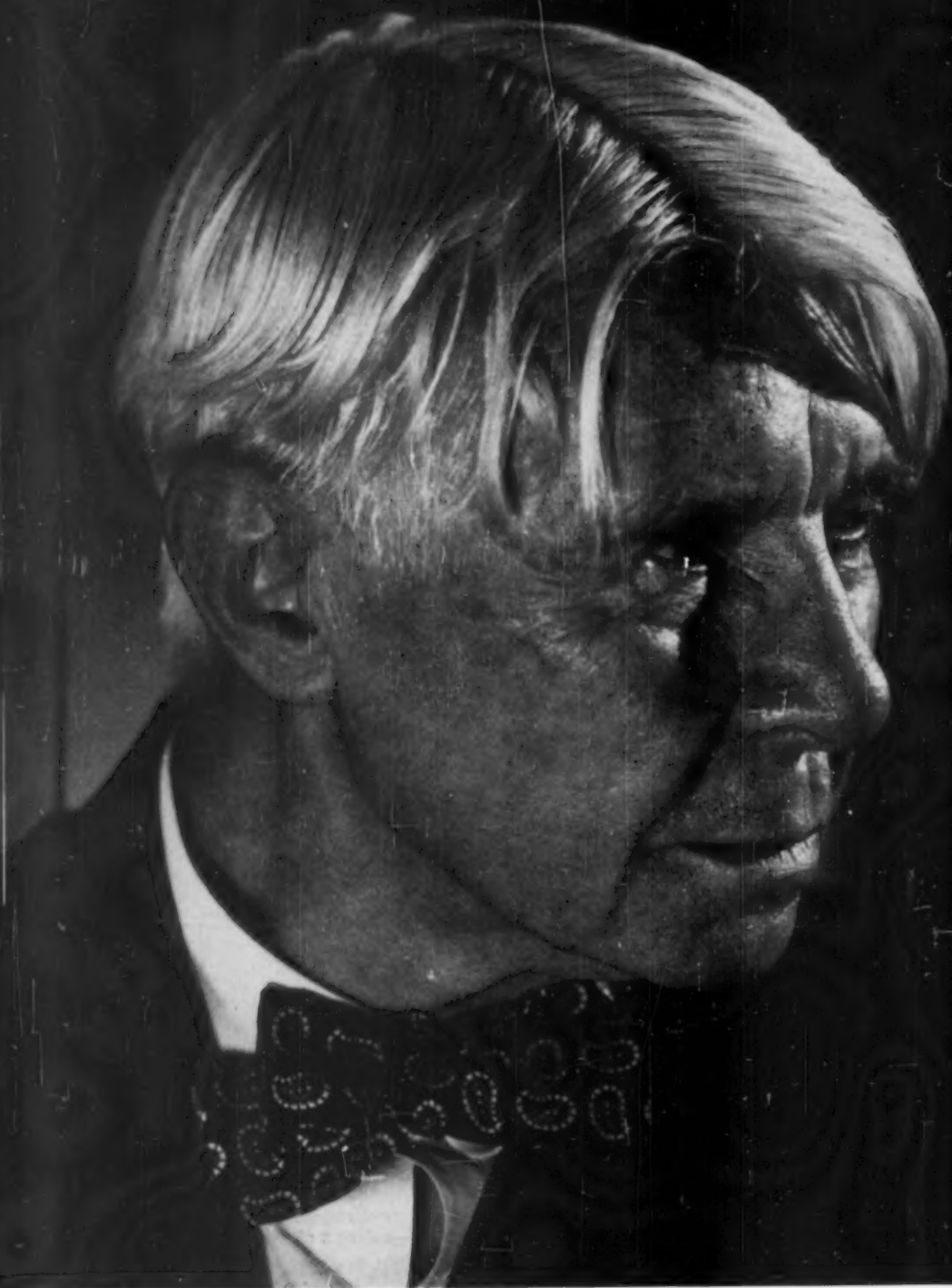
Leaving aside the differences between photographers—their special interests, their characteristic styles—there are four particulars in which they must all work alike. These particulars do not change for amateurs.

1. An interwoven knowledge and love of their subjects. There is a *correct* hour for photographing a budding rose, a mature rose, a wildflower, or a flowering tree. A good dahlia looks like *this*, a new daffodil has character *if*, an arrangement will photograph best *when* . . . and so on.

2. A precise skill with light, focusing, and the other technicalities that become most important in close-ups—plus a natural understanding of color temperature. Flower photography does not always need color temperature meters, but the extremes of the day, or off-balance artificial light, will show up in the finished pictures.

3. An ability to use patience as though it were a technical tool. You can go to the Jackson and Perkins Rose Festival in Newark, N. Y., and watch the top-rank horticultural cameramen. Watch them for a long time; they do a lot of waiting. They wait for the sun and shadows to be right. They wait for the roses to be exactly right . . . and then they wait 35 minutes more for a slight breeze to stop for the half second they want for their exposure. In a close-up a moving petal is only a blur.

4. A sense of color. Although there are no bad natural combinations of color, there can be bad man-made ones (and women-made, when women do the gardening). But the real color problem for a Roche or a Gottscho is not avoiding bad combinations, it is creating living warmth selectively—making a picture out of a rainbow.



CARL SANDBURG

Editta Sherman

Truthful Characterizations in Portraiture

THE STORY OF EDITTA SHERMAN

BY IRMIS JOHNSON



EDITTA SHERMAN

STUDIO 1208, a large skylight studio on the top floor of Carnegie Hall in New York City, was for many years the workshop of Walter Russell, one of America's outstanding sculptors. Today it is the portrait studio of one of America's foremost women camera portraitists, Editta Sherman.

This, tiny woman photographer has been making camera portraits of celebrities

from all walks of life in New York City and at Martha's Vineyard for the past six years. In the summer of 1947 she was commissioned by the Gevaert Company to make a series of portraits for a special display, which included such celebrities as Walter Damrosch, Emily Post, Frank Morgan, Joshua Liebman, Katharine Cornell, Max Eastman, Sigmund Spaeth and Vladimir Golschman.

The enthusiasm and skill of this artist are deeply rooted in her early childhood. Editta Rinaldo was born in Philadelphia. Her father was Nunzio Rinaldo, well-known photographer in Philadelphia and Newark, N. J. He indulgently allowed his small daughter to use his studio and darkroom as a setting for all the make-believe play that was innate in her nature.

As she grew older she was allowed to experiment with the cameras and soon confessed to her father that she wanted to make photography a career. When she was in her early teens she had the opportunity to visit Rome and see the works of great masters. The inspiration they afforded young Editta caused her to set a high goal for herself.

The great paintings Editta Sherman had seen were so full of life they seemed to speak. She determined that she would photograph great personalities so truthfully that the public would come to know them through these speaking likenesses.

She returned to the United States after several years abroad, determined to start on the career she had planned, but she met Harold Sherman, a young electronic engineer and renounced her former plans for marriage and a family.

After several years, however, it was decided that the two careers could be combined in one. With her husband acting as business manager and co-worker, Editta Sherman set to work to achieve the goal she had established for herself in Rome.

Her first venture was in a small rented studio at Martha's Vineyard Island where she photographed prominent people from all walks of life: the theatre, art, literature, music and world affairs.

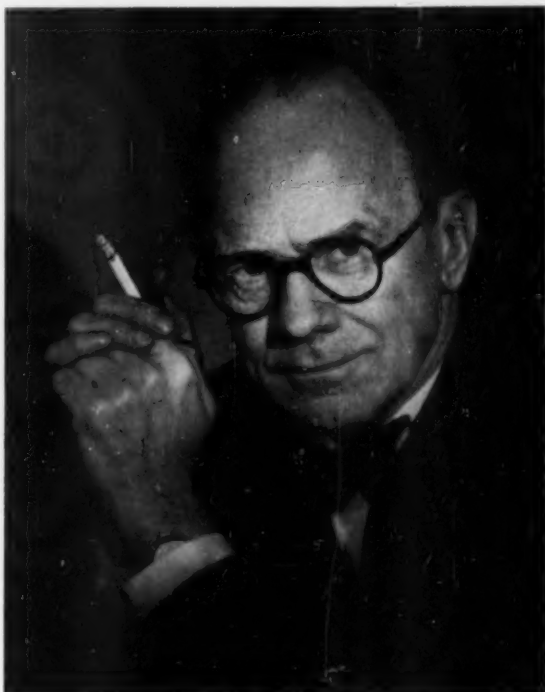
In August 1948 Editta Sherman had her second New York one-woman show. It was called "Men of Achievement" and included business executives, authors, artists, actors, musicians, preachers and a number of the leaders of the "World Federalist Movement."

Commenting on this exhibition in "The New York Sunday Times," Jacob Deschin, APSA, said in part:

Forty-four posed portraits of famous men, which have the

DEEMS TAYLOR

Editta Sherman





LT. GENERAL WALTER BEDELL SMITH, Former Ambassador to Russia

Editta Sherman



DONALD HARRINGTON, Minister, Community Church of N. Y.

Editta Sherman



EZIO PINZA, Star of "South Pacific"

Editta Sherman

quality of candid impressions are on view at the Museum of Science and Industry, Rockefeller Center. Although they are moderately retouched in places to correct excessively sharp detail, no sign of the pencil is noticeable in any of the photographs. The lighting is neither stylized nor obtrusive and it is varied to suit both the character and mood of the subject.

Although portraiture is more widely practiced by amateurs and professionals than any other type of photography, it remains the most difficult of all. The principal aims of the photographer are to make the subject feel at ease and to record some aspect of his personality.

The alertness, sensitivity and sympathetic understanding required are reflected in most of Mrs. Sherman's camera studies. The technical methods she uses should be less important to the amateur visitor at the show than her evident desire to get a truthful characterization.

While this "Men of Achievement" show was on in Radio City, the National Broadcasting Company was inspired to produce a TV show called "The Story of Photography." It was televised and broadcast with Editta Sherman's portraits as a background.

Bob Stanton narrated the telecast and opened with an interview with Fred Quellmalz who described early cameras, stereos and other equipment including a display of modern Speed Graphic news cameras.

During the final eight minutes of the show, TV cameras were trained on Editta Sherman and her 8x10 studio camera and keg lights, as she made a camera study of David Broekman, a prominent conductor-composer. Both Mrs. Sherman and Mr. Broekman were interviewed in an impromptu fashion.

Although Editta Sherman's camera portraits often convey the feeling of candid camera portraiture, she uses a big 8x10 studio camera with a very long focal length lens and a 5x7 reducing back. She favors fast pan film with a combination of daylight and incandescent lighting sufficient to permit exposures around 1/25 sec.

Her sitters usually are pressed for time so she has developed a skill for speed when it is necessary. Oddly enough some of her best portraits have resulted under the pressure of getting a fleeting likeness in just a few minutes.

One occasion comes to mind when the "World Government News" magazine needed a cover shot of Edgar Ansel Mowrer, Washington news analyst and author of "Nightmare of American Foreign Policy." Mr. Mowrer was in New York attending a National Council meeting of the United World Federalists and was rushed by taxi to the studio.

As he munched a sandwich Editta was focusing and arranging lights for the shot. When she was ready she snatched the sandwich and placed a pencil in Mr. Mowrer's hand—to truthfully characterize him as the alert reporter-writer that he is. His family, friends and colleagues all are satisfied that this shot brings out the real Mowrer, often nicknamed "horse-sense and vinegar."

A more recent occasion came when another cover shot was needed. This time the subject was Lord Boyd-Orr the great Scotsman who directed the food and agriculture needs of Great Britain through World War II. He was on his way to a conference with Trygve Lie at the UN but agreed to allow exactly two minutes for the portrait.



DIMITRI MITROPOULOS

Conductor, N. Y. Philharmonic Society

By Editta Sherman

Lord Boyd-Orr sat down, lights were snapped on and Mrs. Sherman asked if he smoked. "Yes, reach my pipe in my overcoat pocket," he said. This was instantly done. Mrs. Sherman handed her subject a magazine which he thumbed with his right hand.

In went the film holder, into the camera. "This way with the eye, Lord Orr," the tiny photographer directed. Zip went the shutter and the sitting was over.

A beautiful 11x14 Gevaluxe print of this cover portrait now hangs in the Nobel Institute in Stockholm and the National Galleries in London.

Portraitist Sherman says she finds that most people are camera shy, even including veteran theatre and movie actors who face cameras in so much of their daily work.

Doug Fairbanks, Jr., Frank Morgan, Raymond Massey, Henry Fonda, Bert Lytell, Walter Huston, Eddie Albert, Jean Pierre Aumont, Ezio Pinza, Ilka Chase, Ruth Chatterton, and Shirley Booth, to mention a few, have all displayed this camera shyness in various degrees.

Invariably this breaks down, Editta Sherman finds, as the shots are taken and a natural friendliness develops with the sitter. She works intensely when necessary, but her winning smile and unaffected personality bring out her subject at those split second moments when her emotional instinct causes her to make the exposure.

Many persons who have been photographed by Editta Sherman voice their satisfaction in words similar to those of Fannie Hurst who said: "Well, that was very easy and I had no trouble at all to relax."

It is obvious that Editta Sherman loves her work and gets a special thrill out of cooperation from her subject. Her satisfaction is deep when she hears a celebrity say of his or her own portrait—"That is the best yet."

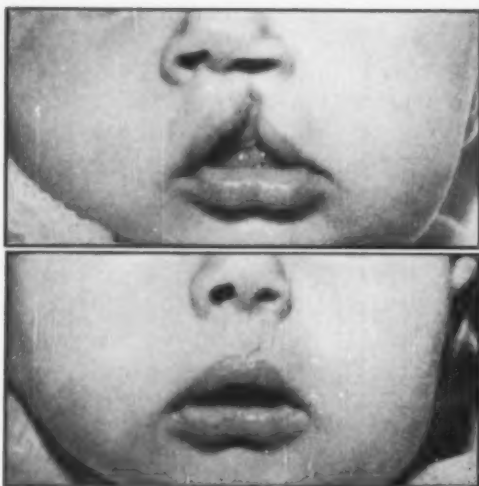


FIG. 1. This photograph shows a child born with a congenital deformity. FIG. 2. (Bottom) Same child after surgery.



FIG. 5. A pork tape-worm cyst in a section of human brain.

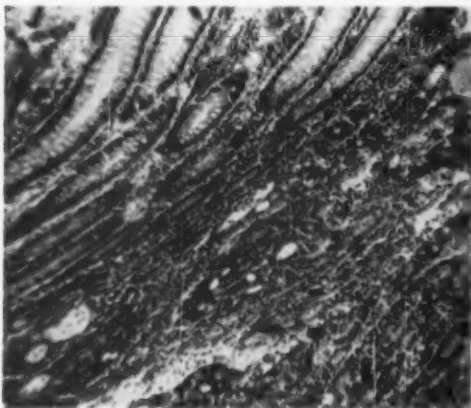


FIG. 6. This photomicrograph (120x) shows the tissue from a colon which contains cancer. The upper left shows the normal tissue and the lower right shows the cancer.

The Role of Photography in Medicine

F. W. SCHMIDT *

SO YOU ARE a medical photographer! What on earth would anyone want with pictures of sick people? These are the usual questions I am asked whenever I tell someone that I am a medical photographer, and perhaps they are fair questions, since so little is known about the activities of a medical photographer or the role of photography in medicine.

A medical photographer is a "jack of all trades" of the photographic profession. He has to be a good portrait and commercial photographer, a documentarian, a photo-journalist, in addition to the many technical phases that are required. Infrared, color, motion picture, and photomicrography are some of the specialized fields that are essential.

What good are the pictures to the doctor or surgeon or to the patient? The patient should be shown other case photographs so he can see what can be done by surgery and will thus know what to expect in his case. Should the patient be displeased about the results of the operation, he can always be shown the photographs taken before the operation for the purpose of comparison. Medical records are not complete without a series of pictures of every patient during each stage of a procedure. It is therefore important to get pictures of patients as soon as they are admitted to the hospital. Let us take a typical example and actually see how these medical photographs are used.

A child, an example of congenital deformity, was photographed as soon as it was admitted to the hospital. Cheiloplasty, the operation required to correct this deformity, was performed, and after the stitches were removed, the patient was again photographed. The medical records were now complete, showing the patient before and after surgery. A short time later the surgeon was called upon to give a talk before a group of people interested in child welfare. This case, being of special interest to the surgeon, was selected by him for discussion. Lantern slides made from these negatives enabled a large group of people to see what could be done for children born with deformities of this type. This is not all, for a new procedure may have been used on this case, so again,

* Department of Medical Illustration, University of Texas Medical Branch, Galveston, Texas. Member of the Biological Photographic Association and the Photographic Society of America.

the photographer may be called upon to make a set of prints so the surgeon may illustrate an article showing the results of his work. Figure 1 shows the child before surgery, and Figure 2 shows the results of the operation. Now comes the point that, I believe, is the most significant, for what could be more convincing and comforting to parents of similar children than to be shown pictures of others who had been restored to normal by surgery?

In the experimental laboratory, the results of an experiment can be recorded by photography. The culture plate on the left, Figure 3, shows the normal growth of *Bacillus subtilis* (hay bacillus) as it appears on an agar plate by the streak method. This method has been utilized for the demonstration of the activity of antibiotics. As can be seen from the plate on the right, Figure 4, the streaks of the same bacillus show broken intervals of clear spaces separating fragments of the streaks. These clear and bacteria free spaces are due to bacteriostatic action of an antibiotic and are clearly shown by photography.

Photography again plays an important role in the tissue culture laboratory, where the study of the growth and functions of living cells is carried on. Here by the use of motion photomicrography and a special type of mechanism known as a time-lapse machine, cells can be photographed, a few frames at a time, over a period of hours or maybe days, to show how they grow and reproduce. When this same film is projected at normal speed, it will reveal what has taken place, but instead of the hours required to make it, it will take only a few minutes time. For research study and teaching purposes, a film of this type is invaluable. The most exciting new advance in this field is provided by the phase-contrast system of microscopy. In essence, this system yields a sort of three dimensional picture of the living cell. In movies this provides wonderful views of the activity of intra-cellular bodies within the living cell.

Photography can be utilized by the pathologist in a number of ways and is of especial value when a rare specimen is obtained, for in no other way can the true

colors be retained. Monochrome is used on many of the fixed specimens and its usefulness must not be overlooked. Figure 5 shows a section of a human brain which contains a pork tape-worm cyst, *cysticercus cellulosae*. A photograph of this type could be used for teaching, medical records, and to illustrate an article on the dangers of using pork which has been improperly inspected or prepared, for this is the way in which this parasitic worm, *Taenia solium*, is transmitted.

The use of photomicrographs in medicine is highly important for in this way minute specimens may be enlarged to such an extent that they are easily examined. Here, again, the pathologist finds many uses for photographs such as the one shown in Figure 6. This section of tissue contains a cancer from the colon, adeno-carcinoma. The malignant tissue is easily differentiated from the normal tissue in this photograph. It might be of interest to know that this photograph was used as an example at a recent medical meeting.

Another use for photographs in medicine, although uncommon, is for the protection of the medical practitioner in the event that he is accused of malpractice. If he has photographs of the patient to show existing conditions upon admission to his care, he is well protected. Insurance companies also find medical photographs a big help in making claim adjustments.

The use of motion picture photography in medicine is not to be overlooked for in this way large classes are afforded a chance to observe an operational procedure from the surgeon's viewpoint. The progress of physical therapy patients are authentically recorded by motion pictures, and at a later date these same pictures can be used for training other patients, and also for the training of physical therapy personnel. Actually, the use of motion pictures for teaching purposes is only limited by one's imagination and budget.

Even though I have mentioned only a few of the many uses, you can well realize that photography *does* play an extremely important role in medicine today.

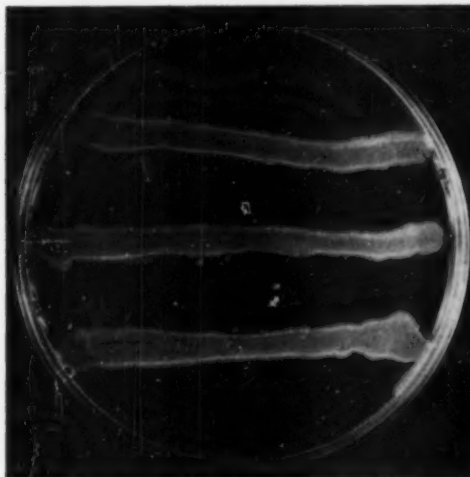


FIG. 3. Culture plate showing the normal growth of hay bacillus.

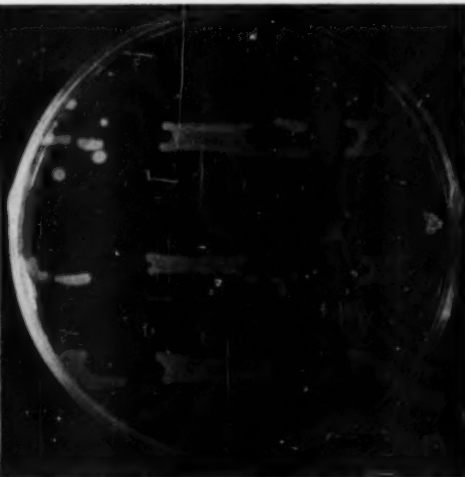


FIG. 4. This plate shows the bacteriostatic action of an antibiotic.



Ten Pictures

from

Yachtsman's Camera

THIS is undress, or backstage photography. These ten pictures show two different approaches to making a picture book. For "Yachtsman's Camera," by Carleton Mitchell, is truly a photographer's book.

Take a good look at the ten photographs on these pages, and you will find:

(1) A wide variety of purely *photographic* values.

(2) A useful approach to the problem of cropping. And note that it is cropping not merely to fit the pages of a picture book, but the kind of cropping that is too little done in photography: for pictorial effect.

Looking first at the photographic values, one can see even in these ten examples out of nearly 150 that are in the finished book, how full use has been made of outdoor photography at night, of bad weather (see the foggy day picture at the upper left), and of interest in the real subject matter of sailing. Mitchell felt that he wanted to show in a complete variety of photographs the absorbing sport of sailing—not just the cliché pictures of billowing spinnakers and sparkling waves. He was not imitating painting. He was not imitating standard sailing photographs: white sails in conventional compositions. He wanted to show how people, and weather, and the details of cruising or racing look and feel and even sound (there is one picture in the book that holds the roar of the sea if ever a picture made you hear; there is another—center, bottom of this page—where the boiling water against a rock is as alive as any true photograph should make it).

Part of the fun of sailing is sometimes to grab a sandwich and a cup of coffee before going back to a spray-wet deck (above, left). Mitchell used a Contax with natural light coming through a hatch. The extreme vertical on this page shows the result. It is the candid technique, but the only correct one to make this subject real. Its companion picture, by sharp vertical cropping, shows a repair job on a spreader, twenty feet above the deck.

Consider the cropping. Is not the sea, like many landscapes, well suited to a long, sprawling horizontal? Is not the water's limitless repetition best expressed by such cropping? Are not other pictures exactly right when square? To be sure, the pictures on these pages are like an exercise (see first sentences). But the photographer is like a musician: he can read a score, listen to a symphony's rehearsal, try a passage on his own cello,

(Turn to page 781)

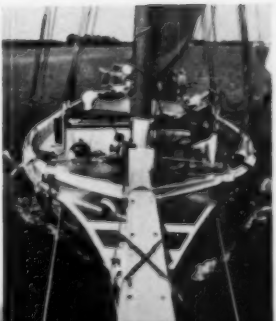
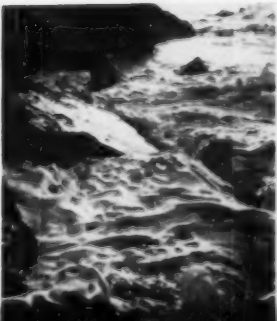




FIG. 8

SYMBOLS and THE NUDE

P. H. OELMAN, FPSA

MANY YEARS ago as I was groping for the key to successful pictorial photography, I stumbled across a quotation ascribed to the late Leonard Misonne, the Belgian pictorialist. As translated, the quotation read: "The subject is nothing. The light is everything." I recall that at the time it seemed to me he was indulging in a bit of bombast, because the principal subject matter of so many of his pictures was mud. Taken literally, I did not think that the statement made much sense. Today, however, I am inclined to question the adequacy of the translation, for after studying many of his prints I am convinced that by *lumiere*, translated as light, he meant the reflected light or image of the subject. Thus a better interpretation might be, "The substance of the subject is unimportant. Only its image matters." If that still seems cryptic, perhaps he could be paraphrased, "It makes no difference what a subject is. The only thing which matters is what it looks like to the camera." If this is correct, it follows that we, ourselves, must see the subject as the camera sees it.

This is no easy task, as I am sure we all can testify. How many times have we photographed a scene of breath-taking beauty or grandeur only to find the print monotonous and uninteresting. The fact is that when we look at a subject we do far more than merely see its image. Perception is perhaps the most miraculous of all human phenomena. Based largely on the information transmitted to it through the images on the retinas of our two eyes, but aided by other senses, the brain instantly and automatically interprets the intelligence so acquired, and, in the light of experience, as recorded in our memory, draws conclusions not only about the appearance of what we see, but about its size, distance, physical characteristics and its very substance. We say we know what an object is, without realizing that our "knowledge" is an interpretation of visual symbols from which we have drawn certain conclusions. In a sense, these symbols are not unlike the words on this page from which we receive information though they are only black marks on white paper.

Photography, too, merely makes black marks on white paper. The interpretation of these marks takes place, not in the camera, but in our brain when we look at prints. If we are to interpret them as intended, the symbols must be clear and unmistakable, for they are the only clues we have of the meaning of what we see. We no longer have the collateral information which aided our perception of the subject when we looked at it directly.

If the picture is to make sense we must know which symbols will be recorded and what they imply. We must see the subject, not as three-dimensional substance, but as a two-dimensional image composed of light.

This is the first thing the artist must learn to do. He must see the image before he can record it with pencil or brush. In photography, however, recording the image is a mechanical process and it is possible to make snapshots without seeing the image. No matter how elaborate his equipment or how great his technical skill, until the photographer, too, learns to see the image, he is merely making snapshots, and depending on Lady Luck and the law of averages for his results.

But the pictorialist must do more than see the image as the camera sees it. Just as the writer must know the meaning of words, so the pictorialist must know the graphic symbols, if he is to arrange them to express himself photographically. He must be able to emphasize those which convey his intent, and subordinate those which may be irrelevant or confusing. Nicholas Haz, FPSA, has aptly called this process "Image Management." Yet despite the clear exposition which he and others have given the subject, composition is widely misunderstood. Far too many view composition as a set of fixed rules, and use it only as a standard for criticising prints. Pathetically few recognize composition as a



FIG. 1



FIG. 2



FIG. 3

statement of symbols and other devices, and their psychological interpretation. It is through these symbols and devices that the meaning of pictures is expressed. It is the intent of the picture which determines those to be used and those to be disregarded.

The foregoing observations are applicable to all photographic subjects. Let us now consider their special application to the nude. I said earlier that it is not easy to distinguish between a subject and its image. This is difficult enough when the subject is inanimate, but when it is the warm flesh and blood of a human body pulsating with life, really rigorous mental discipline is required. It is no wonder that pictorial veterans frequently revert to type and become avid snapshooters again in the presence of a nude model.

Nicholas Haz has dubbed the pictorial, the "Ain't-life-beautiful," as distinguished from the documentary, "Ain't-it-a-shame" school. When the snapshot approach to the nude is used, it is a toss-up which of these will describe the print better—but the odds favor the latter. There is no field of photography in which the tyro's preoccupation with subject matter produces such disastrous results.

Figure 1 is a typical example. A thoughtless pose is here combined with back lighting naively assumed to be glamorous because of its frequent use in Hollywood stills. Observe how the model's chest appears caved in and how the left arm has been emaciated by the unwise use of this light. It perhaps is superfluous to call attention to the wrinkles in the neck and abdomen, the prominence of the shoulder blades, or the apparent immensity of the model's derriere. The inappropriate hair-do only serves to show how the improper use of a strong curve at the back of the neck gives a weak and awkward appearance rather than one of strength and grace. The "Ain't-it-a-shame" picture is, of course, always blamed on the model. It happens, however, that the model I have treated so shamefully in Figure 1 is one of the best I have ever used, and is the subject of Figures 4 through 8 illustrating this article.

Many assume that since the female form has been

poetically styled "the body beautiful," all bodies are always beautiful. The fact is that this designation requires the liberal use of poetic license. While it is true that Nature depends on the mutual attraction of human beings for the perpetuation of the *genus homo* and has endowed the body with many aesthetic qualities for that purpose, the body also has utilitarian duties to perform. No one will question the utility or necessity of the body's framework, yet few will see beauty in its bones. Even in the unusually well developed figure these are frequently in evidence.

There are other indications of compromise with beauty in favor of utility. Consider the foot, for example. Its most useful form perhaps is that of the African native. It is large, flat and has a long heel. Its axis is at right angles to that of the lower leg. It is well adapted to its function of balancing and propelling the body. But it is not a thing of beauty. It would be far more acceptable, aesthetically, if it were small, arched, with a small heel, and if the axis were inclined to intersect that of the lower leg diagonally. We do not bind the feet of our girls to keep them small, as was the Chinese custom. Such treatment made them absolutely useless and the Chinese lady could hardly stand and could not walk at all. Our Western civilization makes use of subtler and less drastic means to improve the foot's appearance. High heeled shoes make the foot look shorter, the arch higher and minimize the heel. The inclined axis of the foot creates smoother transitional lines connecting the foot and leg. Utility, though impaired, is not totally destroyed.

Control of the Image

The example of flattery just cited immediately suggests our control of the image through pose. Before pursuing this means further, however, it is desirable to consider the qualities which we desire to express and the symbols which suggest them. Among the attributes which we associate with our ideal of feminine beauty are smoothness, softness, gentleness, grace and delicacy. Symbolic of these qualities are smooth transitional lines, gentle curves—particularly the "S" curves, gentle gradations of tone, rhythm, etc.

In dealing with most subjects it is necessary to find our symbols ready-made and to isolate and emphasize them by choice of viewpoint and lighting. When photographing the figure, however, we can actually create desirable symbols through the pose of the unusually plastic body. As already suggested herein, this can readily be demonstrated by the legs and feet. Figure 2 shows these appendages performing their useful function of supporting and balancing the body. There is little about their lines suggestive of feminine charm. Figure 3 is a picture of the same legs and feet. Relieved of their utilitarian duties and posed as they are here, their smooth transitional lines convey a feeling of grace and beauty.

Intimately associated with pose is viewpoint. The same pose when viewed from different angles will result in quite different images and symbols. In my lectures I use as an illustration two photographs of the same statu-

ette. Viewed from the front the lines of the figure are the very essence of loveliness. From the side the lines produce a gross and extremely awkward effect. Space does not permit the inclusion of the illustrations here, but I have introduced two other photographs which demonstrate the point, though in a less startling fashion. Figures 4 and 5 were made from viewpoints about as close together as is possible when two cameras are used simultaneously on individual tripods. It shows clearly why it is not practicable to permit more than one person to attempt to photograph a pose at the same time.

Since the image with which we are dealing is composed of light reflected by the subject, it follows that lighting will exert a powerful influence on the symbols recorded by the camera. To emphasize the great differences in images of the same subject, I have introduced examples of extreme forms of lighting. It will be recalled that the same model was used in all the illustrations except Figures 2 and 3.

Simple vs Extreme Lighting

The simplest possible lighting is shown in Figures 4 and 5 which have already been discussed. It consists of a single light source placed to the right of and slightly above the lens. This is comparable to the so-called "basic" light. It is perhaps the safest lighting, since small changes in pose and viewpoint do not materially alter its effect. Although it places slightly greater emphasis on line, it reveals form to a considerable degree. It is sometimes classified as flat, though it does not produce a flat effect unless the source is large and diffused. It is well adapted to high key treatment, especially when the source is placed very close to the lens.

In contrast let us take an extreme example of lighting which emphasizes form at the expense of line. Figure 6 is lighted by a diffused source from directly overhead. Note the exaggeration of form and the almost complete absence of line. Now compare Figure 6 with Figure 7. In the latter, form is still exaggerated but the lighting of the background has restored at least a part of the outline. The principal light source has been lowered and moved back and to the left. The feeling of gross obesity has given way to one of great volume. Although the model held the pose while the light was being changed, she seems to have lost about twenty pounds during the few intervening seconds. A curious effect is the apparent lowering of one breast and the raising of the other. In the extreme form illustrated here, neither lighting is of much use alone, but when combined with a strong fill-in comparable to basic light, they serve to accent form and add to the illusion of the third dimension.

An appropriate use of such a combination of lighting is shown in Figure 8. It was chosen as the final illustration because of its extreme simplicity and because almost every element in the picture area has symbolic significance. The picture was intended to express the freedom and vitality of youth. Nudity is, itself, a symbol of freedom. But our conception of freedom also includes space, so



FIG. 4



FIG. 5



FIG. 6



FIG. 7

the ideal setting would be that of the wide open spaces of the desert, sand dunes or the beach. Since none of these natural backgrounds were available, and it seemed desirable to make the photograph in the studio, it was necessary to create the illusion of space through other means. The figure was placed so as to make the best use of the limited indoor area available, but this was insufficient to provide the feeling of spaciousness. Therefore, depth was suggested by introducing a horizon line, symbolic of great distance. It was produced by stretching a piece of cloth, slightly darker than the background, across the latter, and throwing both slightly out of focus. The visual effect is not unlike that experienced at the beach. Vitality is implied by the vertical axis of the figure and its pose—on toes, with chin and elbows up. The long smooth lines of the body and the firm curve of the breast are indicative of youth. I should like to point out that a literal reproduction of a beach was not attempted. It is quite sufficient to suggest distance and allow the imagination to fill in the details.

Some strict adherents to the rules of composition may find fault with the composition of this picture. Those who are merger conscious will point to the tone merger of parts of the model's back and the background. Had this been avoided by lowering the tone of the background, the entire atmosphere of the setting would have been altered. The effect would have been that of an over-corrected sky, entirely out of character here. A beneficial line merger assists the eye over the gap in the outline,

which therefore is hardly noticed. Others will object to placing the figure on the less important left side of the picture area. They may also want the long shadow used as a lead-in line from the left. I agree with the observation that the right is a more prominent position and also that a lead-in line from the lower left is a very effective device to carry the eye to what it is intended to see. In this instance, however, the figure is, by its very nature, already so dominant that such devices not only are unnecessary, but would overemphasize the figure and destroy the balance between it and the background. It is the sense of spaciousness which needs emphasis here, hence the use of the right side for that area—empty except for the symbolic horizon—is fully justified. Reverse the picture by looking at it in a mirror and see how the lead-in line hurries the eye past the open space and how much more confined the figure seems.

In looking back over what I have written, I have the uneasy feeling that some readers will be disappointed. They may have expected an unfailing formula for the making of pictorial nudes. That was not my purpose. All I have tried to do is to call attention to some of the elements of which images are composed, and to give some examples of their effects. It is up to the individual to decide how he wishes to employ them. In using the same model for the illustrations, I have endeavored to demonstrate the proposition that it is the image, not the substance of the subject, which determines the effectiveness of pictures.



STUDIO WINDOW

P. H. OELMAN FPSA



George Eastman

and His Place in The History of Photography

C. E. KENNETH MEES, HON.FPSA

GEORGE EASTMAN was a man of many parts. He was an inventor, a technologist, an organizer and executive, a leading citizen, and a philanthropist. His house, which he left to the University of Rochester, has now been transferred by the University to a Trust, which is developing it as a museum of photography and a memorial to Mr. Eastman himself. This house forms especially a memorial of one side of George Eastman's character—his relation to the science and art of photography.

Mr. Eastman described himself in an interview as "an amateur photographer." The interview dealt especially with the "photographer," with the growth and development of the business which Mr. Eastman had created; but the characterization of George Eastman which is the most significant of the man is the word "amateur." Occasionally some writer, forgetting the history of his subject, writes disparagingly about "amateur scientists." Presumably the critic thinks that the word "amateur" is synonymous with "beginner" instead of meaning, as it does, one who does things for the love of doing them. Men do things for many reasons: to earn their bread, to obtain riches and luxury, to attain power, for the approval of their fellows; but the things that are done best are done for the love of the doing.

In 1877 George Eastman, twenty-three years old and employed as a bookkeeper in the Rochester Savings Bank, contemplated a visit to Santo Domingo, and a friend suggested that he should learn to take photographs so that he could make a record of his trip. He didn't make the trip, but he bought the necessary apparatus and arranged with a local portrait photographer to teach him to make photographs.

Photographs at that time were made by the "wet collodion process." Glass plates were coated with a layer of collodion made by dissolving nitro cotton in a mixture of ether and alcohol containing some bromides and iodides. The plate was made sensitive to light by dipping it into a bath of silver nitrate solution and was exposed in the camera while still wet, with a piece of blotting

paper in the bottom of the holder to catch the solution as it drained off. Then it had to be developed while still wet. This made it necessary for the photographer to carry a tent around with him to act as a darkroom for preparing and developing the plate. In spite of all the difficulty, Mr. Eastman became most interested in the making of pictures, and in an interview published in 1902 he records how a crowd drew around wherever he set up his apparatus, as though he were going to open a patent medicine show. He says:

EASTMAN'S "AMERICAN FILM"

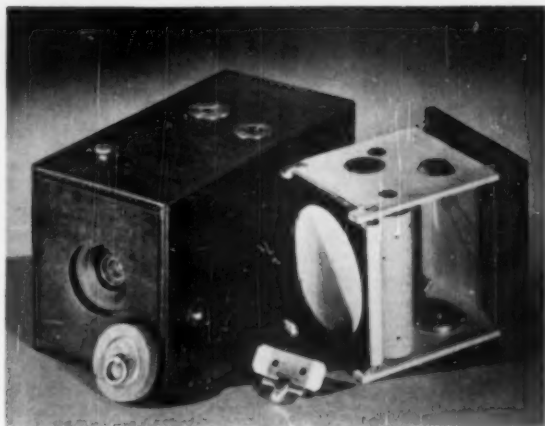
In 1884 George Eastman experimented with stripping film, using this photograph of himself for his tests. The date is in his own handwriting.



* An address given on the occasion of the opening of George Eastman House, Inc., November 9, 1949.



Prints made from the first Kodak camera, pictured on the right. After the exposures were made, the camera had to be sent to Rochester, unloaded, and the exposed film removed and developed.



Announced in June 1888, the first Kodak camera was an oblong black box, 6 $\frac{3}{4}$ inches in length and 3 $\frac{1}{4}$ inches in width and depth. The film holder at right held film for 100 exposures.

One burning hot day I set up my encampment to go about photographing the natural bridge at Mackinac and then disappeared into my little teepee to make the plates ready. When I came out, a party of tourists had draped themselves about the bridge in the engaging attitudes that were then thought necessary when one was photographed close to nature. I paid no attention to them, took several exposures and, when I had finished, one of the men came forward and inquired the price. I told him that I was an amateur making pictures for my own amusement and not for sale. He exploded: "Then why did you let us stand in the hot sun for a full half hour while you fooled around with your contraptions! You ought to wear a sign saying that you are an amateur!"

Being an amateur was, I suppose, arduous work, but one never finds a hobby hard riding and I went out taking photographs whenever I could, read everything that was written on the subject, and generally tried to put myself on the plane of the professional photographer without, however, any idea of going into the business of photography. Since I took my views mostly outdoors—I had no studio—be bulk of the paraphernalia worried me. It seemed that one ought to be able to carry less than pack-horse load.

In the course of his reading, Mr. Eastman became in-

terested in the accounts which were appearing in the British photographic papers of the making of gelatin emulsions. The *British Journal of Photography* particularly was publishing articles from enthusiastic amateur photographers who were making their own emulsions and coating plates which could be used dry instead of the wet plates. The use of gelatin for making photographic emulsions had been suggested by Maddox in 1873.

In 1878 the *British Journal of Photography* reported that Mr. Charles Bennett had exhibited at a meeting of the South London Photographic Society a number of photographs, one of which was an instantaneous view of a boat on the river taken in approximately 1/20th second. They excited much interest, and Mr. Eastman told me that it was the remarkable instantaneous photographs taken by Bennett and exhibited in London which impressed him with the possibilities of the dry plate process.

Taking a formula from the *British Journal of Photog-*

Photographers using the wet collodion process had to carry a dark tent and all the chemicals needed to coat, sensitize and develop glass plates wherever pictures were made outdoors.

George Eastman in his home workshop on the third floor of his house at 900 East Avenue, Rochester, New York. The home has been made into a living memorial to the man who popularized photography.



raphy, Mr. Eastman started to make gelatin emulsions. He says that at first he wanted to make photography simpler merely for his own convenience, but soon he thought of the possibilities of commercial production. By June 1879 he was not only making plates which were entirely successful, but he built an apparatus for coating them, and this he patented both in the United States and in Europe.

In April 1880, Mr. Eastman leased the third floor of a building on State Street in Rochester and started to manufacture dry plates for sale. There is no need for me to discuss the early history of his business. It was similar to that of many other pioneers. Difficulties were met and overcome, utter collapse was faced at least once, but within a few years plates were being manufactured on a commercially profitable basis and Mr. Eastman was able to turn his attention to the development of new products. His experiments were directed to the use of a lighter and more flexible support than glass. The first thing that he tried was the use of paper to carry the emulsion, the paper being in the form of a roll carried in a roll holder which was used in the ordinary view cameras in the same way as the holders for glass plates.

I think that at that time Mr. Eastman had no idea of the amateur use of photographic materials, which became so important to him a year or two later. I think his idea at first was just to replace the plates which he was making and which were chiefly used by professionals for portraiture.

The first film advertisements stated that "shortly after January 1, 1885, the Eastman Dry Plate and Film Company will introduce a new sensitive film which it is believed will prove an economical and convenient substitute for glass dry plates both for outdoor and studio work." This system of photography by roll holders fitted into the existing apparatus and was immediately successful, but the paper was not entirely satisfactory as a carrier for the emulsion because the grain of the paper was likely to be reproduced in the print.

Mr. Eastman tried to substitute a film of collodion for the paper, but he couldn't make a collodion film from the solution of nitrocellulose in ether and alcohol which was strong enough to carry the emulsion, so he coated the collodion on paper to get strength, then coated the emulsion on the collodion, and used this material after exposure and development by stripping from the paper the collodion and gelatin carrying the image.

At this time Mr. Eastman's mind apparently took a turn which changed the whole direction of his work and established the lines on which his success in photography was based. He once said: "When we started out with our scheme of film photography, we expected that everybody who used glass plates would take up films, but we found that the number which did so was relatively small, and in order to make a large business we would have to reach the general public."

To reach the general public, he decided to make a new kind of camera, and this camera, which was introduced on the market in June 1888, was the first Kodak. It was a box type of camera, light and of small size,

loaded with a roll of the stripping paper of such length as to provide for a hundred exposures. The price of the camera loaded and including a shoulder strap and case was \$25. After exposure, the camera had to be sent to Rochester, where the exposed strip was removed, developed and printed, and a new one inserted at a charge of \$10. This was a radical change in policy. The roll holder had fitted into the existing system of photography. The Kodak created an entirely new market and made photographers of people without any special knowledge of the subject and who had as their only qualification the desire to take pictures. Anybody could buy a Kodak, "press the button," and Mr. Eastman's company "would do the rest." Modern photography started with the Kodak.

While the Kodak was being developed, Mr. Eastman



On the third floor of the center building, in 1880 George Eastman began to manufacture dry plates for sale. The building still stands on State Street in Rochester, N. Y., just a few blocks from the present 19-story Kodak Office Building.

continued his attempts to get rid of the paper base. He hired a young chemist who made solutions of nitrocellulose in various solvents and eventually produced a sheet of film base which had the necessary strength and flexibility.

In August 1889, the first transparent film in rolls was marketed. This film was first made by spreading a solution of nitrocellulose on a glass table 200 feet long by 42 inches wide (made up of 10 glass plates 20 feet long joined together at their ends) which when dried was first coated with a *substratum* of silicate of soda to make

the emulsion adhere to it, and then coated with gelatin emulsion. The advantages of this nitrocellulose film over the stripping film were that, as it was transparent and grainless, it could remain as the permanent support for the negative, thus avoiding the paper base and the stripping operation, and also it produced better results in printing.

In 1891 the amateur transparent film was further improved by making it daylight loading. This was accomplished by winding it on a wooden core inside a light tight box and attaching black cloth leaders to the ends of the film. Later it was wound inside a protective sheet of black paper with a sufficient overlength of the paper so that the camera could be loaded, as it is today, without endangering the sensitive film.

In 1895 the first Pocket Kodak was designed. The first lot of these cameras manufactured amounted to 25,000, and in 1898 a further improvement in cameras was made in that they were made collapsible. The first of these was known as the "Folding Pocket Kodak." In 1900 the first Brownie camera, intended for children, was put on the market at the price of \$1.00.

The development of roll film photography produced a situation very different from that which had existed previously. Until the coming of the Kodak and Brownie cameras, the photographer had been a more or less skilled craftsman; he developed his own negatives and made his own prints and was, perforce, interested in the technical aspects of the subject. The new photographers using the simple roll film cameras no longer troubled in the least about the technique of photography nor were they interested in its craftsmanship; they were concerned only with getting photographs of subjects which interested them. The manufacture of film developed as an industrial operation, while the finishing of the pictures was undertaken all over the world by thousands of small establishments which had facilities to develop the film and make prints for the photographer.

In discussions of the history of the Kodak Company, much stress is laid, and rightly laid, on the evolution of film, and almost as important as the first manufacture of film in long lengths was the design of manufacturing methods which enabled the vast production of later days to be accomplished. But if Eastman had not made film, almost certainly someone else would have done it. If the Kodak had not been thought of, however, it is very doubtful if anybody else would have realized, at any rate for many years, that there was a great demand for photographs from people who were quite unwilling to spend the time and energy required to learn the art of photography. Throughout his life Mr. Eastman was profoundly interested in the technical developments of photography, but his deepest concern always was to develop some method by which satisfactory results could be obtained by the public at large, and it is this idea which represents his major contribution to the development of photography.

In 1923, the Kodak Company first marketed 16mm film and the process of amateur cinematography associated with it. This introduction was exactly akin to the intro-

duction of the Kodak. The film was supplied ready to be loaded in daylight in a convenient portable camera and after exposure was returned to the Kodak Company, which developed it by a reversal process to make a picture ready for projection in the home. Taking motion pictures in 1924 was no more difficult than taking pictures in the Kodak in 1889.

Mr. Eastman was always most anxious to see a similar development in color photography. He ordered work done on many processes. The first "Kodachrome" process, introduced in 1928 for 16mm pictures, came nearest to meeting his requirements, but when the problem was finally solved by the introduction of the Kodachrome process in 1935, Mr. Eastman was no longer here to see it.

The Influence of the Amateur

Photography owes its existence and progress to amateurs. Fox Talbot, Scott Archer, R. L. Maddox, George Eastman—all became interested in the taking of pictures and in pursuit of their hobby worked out the improved processes and methods which are the milestones of photographic technique.

But Mr. Eastman was not only an amateur photographer. He was an amateur in half a dozen other fields, and all of them he pursued with that same enthusiasm and thoroughness which made such a success of his photography. An enthusiastic camper, he studied every detail of his camping kit and worked out improvements himself. For years he was an amateur musician—as an auditor, not a performer—and his interest in music led him to experiment in the teaching of music by building and organizing a school of music.

In spite of the interest he took in his work and his play, Mr. Eastman was no faddist. Some enthusiasts, especially wealthy and successful enthusiasts, are full of fads and insist on carrying them out in everything they do. Mr. Eastman did not; he consulted experts in his business, in his music, and his building; he secured the best advice available, and when he did something unusual it was due not to impulse but to conviction founded on careful study and knowledge. Also, though his interests were wide, they were by no means universal. He became so deeply interested in certain matters that it was necessary to limit his attention in other directions. Mr. Eastman, for instance, believed that pure science was useful both to the community and to his business; he helped it greatly by his gifts and turned to it for advice when he needed it, but he himself never studied deeply any branch of it.

As a young man, Mr. Eastman started to make photographic plates, and for many years the Kodak Company absorbed his immense energy. He became a great business leader, the creator of a great industry. He was a good man to work for and to work with—enthusiastic, critical, strict, exacting. He could detect the vital point in a new problem in business with startling rapidity and clarity. But Mr. Eastman was always an amateur—an enthusiast in everything that he undertook and, not least, in photography and in the development of photography throughout the world.

PHOTOGRAPHY AND PROGRESS†

J. DUDLEY JOHNSTON, HON.FRPS, LONDON, ENGLAND



The Author, Photographed by
Dr. Orrin Sage Wightman, Hon.PSA

IN THE long run, all sound progress, whether in photography or elsewhere, is founded upon the lessons of the past. Even though continuity appears, temporarily, to be interrupted by revolutionary upheavals, sooner or later a return is made to the line of continuity of development. Hence the value and the authority of tradition.

In the broadest sense, revolution is anti-progression. Yet every revolutionary movement contains some germ of good which it is our duty to preserve and to absorb into the general movement. Furthermore, progress is not merely change, but change for the better. And the decision whether a change has been for the better can be made only by posterity.

There have been in the past, and undoubtedly there will be in the future, many developments in photography which are the outcome of revolutionary movements. With many of these developments I am by no means in sympathy. However, regardless of your attitude or mine, and where our sympathies may lie, these are of the phenomena of photography. With them we must be concerned whenever we consider photography or progress, and, particularly, whenever we give serious thought to photography and progress.

It will be my purpose to survey that use, or phase, of photography commonly known as pictorial. I will disregard the employment of photography in science, industry, medicine, and all those other fields in which we may say it is employed largely as a recording medium. Photography and progress in the field of pictorialism I shall consider chiefly from the standpoint of the value and authority of tradition.

When Henry Fox Talbot, traveling in Italy in 1833, discovered that his skill with pencil and paper was inadequate

to sketch the scenery to his satisfaction, he dreamed of discovering some way of fixing by chemical means the image cast on paper by the *camera obscura*. After six years of intermittent experimenting, he was able to announce in January 1839 that he had solved the problem.

Of course, when he came to put his discovery to actual test he learned that his was not a complete solution. Because of the limitations imposed by his materials, Fox Talbot was forced to be content with a modest range of photographic subjects. His earliest surviving picture is that of one of the windows of his home. Among other surviving pictures are those of a broom beside a stable door, a ladder against an outbuilding, a haystack, and, later, various indoor subjects such as statuettes, cabinets, and the like.

Fox Talbot selected these subjects less by preference than by necessity. They were, invariably, those which would make no movement during the necessarily long exposure. It was the Italian scenery which prompted his initial experiments. His natural impulses were esthetic. Yet he attempted few landscapes. His outdoor photography was confined largely to architectural subjects. It is obvious that he was handicapped by the slowness of his paper negatives and, particularly, by their lack of sensitivity to green and to red.

We are fortunate in the preservation of a pencil sketch made by Fox Talbot in Italy on 7 October 1833. In "The Pencil of Nature" Fox Talbot refers to this view and this sketch as his starting point. It is, for us, the starting point of pictorial photography as we know it today. Almost exactly 90 years later I was privileged to photograph the same view.

The passing of a decade produced one of the most striking events related to the early use of photography. The Scottish painter, David Octavius Hill, had been commissioned in 1842 to paint a large picture containing the portraits of some 400 ministers of the Church of Scotland. On the advice of Sir David Brewster, well-known

† From The 1949 PSA Progress Medal Lecture. The original paper was illustrated with approximately 80 slides and contained comments on most of them. Acknowledgment is made to Victor H. Scales, Hon.PSA, for putting the Lecture in a form suitable for publication.



Lacock Abbey, from a Calotype by Fox Talbot. Courtesy of George Eastman House, Inc.

scientist of the day and personal friend of Fox Talbot, the painter turned to this new recording medium as a labor-saving device, which would enable him rapidly to obtain the large number of portraits required for his oil. Robert Adamson, of St. Andrews, aided him with the technical phases of the work. Together they made portraits not only of the 400 ministers but, later, of many hundreds of celebrities of the art and literature of their day. More than a century has passed, yet these portraits, made with primitive equipment and materials, still are recognized as being among the highest achievements of photography.

Monumental as may have been this development, certainly from the artistic point of view, it was destined to have little influence upon the progress of photography until some four decades later. Then J. Craig Amman, also a Scotsman, produced a series of photogravure reproductions from the original paper negatives made by Hill and Adamson. These elicited from artists of the first rank warm expressions of admiration. Among them

was James McNeil Whistler, the American painter and etcher, who commented: "They are pictures—and very fine pictures too." Among them was Hill's "Girl in a Flower Dress."

To our eyes these pictures are rendered more attractive by the picturesque costumes. The slight softness of definition, caused by the paper negative and the calotype print, helps also. However, paper negatives and calotype proved to be something less than ideal for purposes of recording, and little was done photographically in the fields of commerce and science during these years.

In 1850 Scott Archer brought out his wet collodion process. This provided a quality of recording satisfactory for scientific and commercial uses, yet except for commercial portraiture, the new process was employed chiefly for pictorial purposes. While it served reasonably well in portraiture, the process still was lacking in speed and color sensitivity.

These same limitations discouraged the use of the wet collodion process even for landscape photography. At

the first meeting of the newly-formed Photographic Society of London in January 1853, the vice president, Sir William Newton, a distinguished artist, lamented the many defects from which photography then was suffering for reason of the inadequacy of materials. Nevertheless, and despite the drawbacks, British photographers persevered with landscapes, a phase of photography which always has held a special appeal for them.

What American photography was achieving during this period is little known to us in Britain, photographic journalism then being virtually non-existent. We do know that the daguerreotype flourished in America for some time after it died out in Britain. Also, the collodion positive in the form known as "ambrotype" was carried to a high degree of perfection.

The most prominent worker of the early wet collodion period was Roger Fenton (1820-1869). Founder-member and first secretary of the Photographic Society of London (1853), Fenton began in 1852 to photograph Britain's cathedrals, abbeys, and castles. These photographs, mostly 12x15 inches, are among the classics of photography.

Fenton was an industrious worker who did not permit his profession as a lawyer to prevent him from making many hundreds of his large photographs. More than 400 now are in the Royal's collection. In 1855 Roger Fenton went to the Crimea as the first official war photographer, a part to be played several years later by Matthew Brady in the American Civil War.

Wet collodion proved to be a much more suitable process for recording than the paper negative calotype. Still, some extraordinarily fine work was produced by paper negatives. The Royal has a series of nearly 500

photo-paper-negative records of the temples and palaces of Southern India made by the Government Survey under Lieutenant Tripe in 1858. They incorporate marvelous rendering of detail. Yet scientists and industrialists were disinclined to employ photography, although there were promising exceptions. Sir Charles Vignolles, one of the founders of the Photographic Society, reported that, for purposes of checking construction progress, his firm was making photographs every week of a bridge it was building in Russia. A doctor, speaking before the Society in 1857, described the use of photography in his medical work.

Progress was, however, being made on the pictorial side. The taste of the times and the ambitions of photographers favored pictures large in size even by comparison with present-day enlargements. Two eminent early pictorialists, Oscar Rejlander in 1857, and Henry Peach Robinson in 1858, produced photographs having dimensions of 18 to 20 inches by 30 to 40 inches. They were unable to take pictures of such large size directly on a single plate. Available printing materials were unsuited to making direct enlargements. They were compelled to assemble, or to build up, their pictures by composite printing from separate negatives.

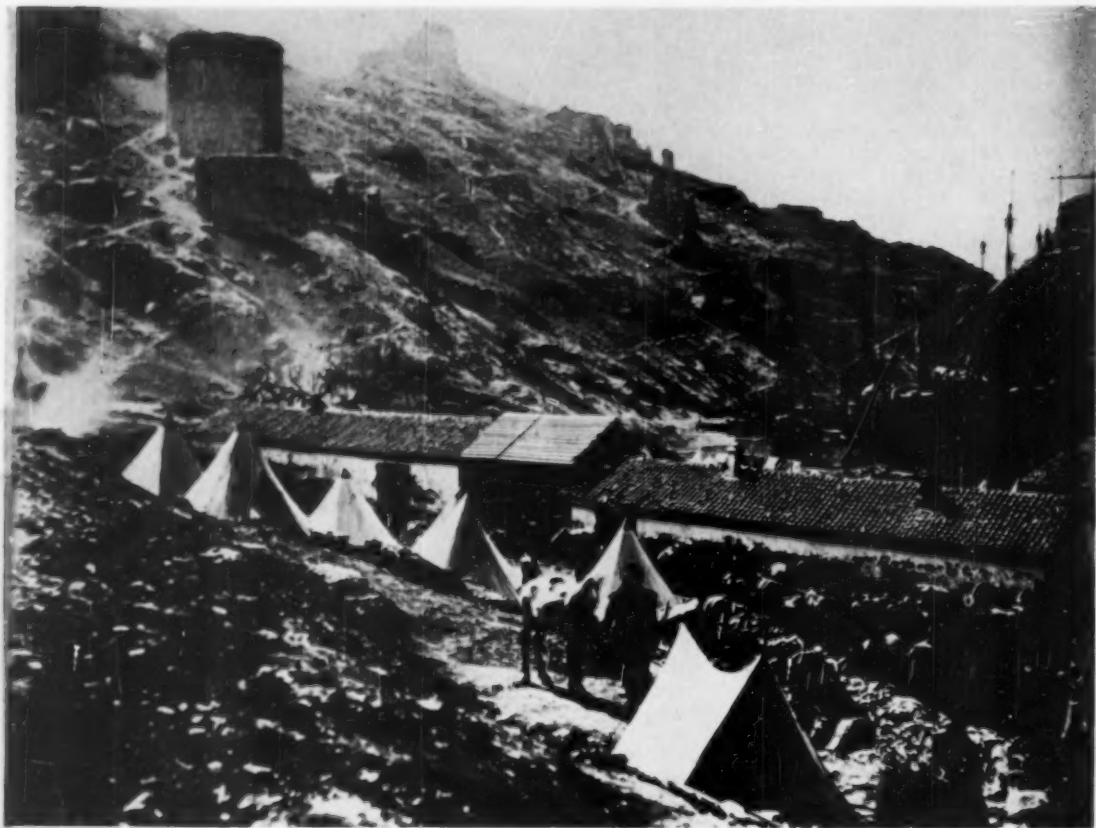
The most famous of these composites, both because it was the first and was purchased by Queen Victoria, was Rejlander's "Two Ways of Life," produced in 1857. This photograph contains more than 30 figures. Each was printed separately on sensitized paper, a long and difficult technical feat. So far as is known, Rejlander printed only four copies of this picture—and small wonder! I believe that none today would be prepared to argue the artistic merits of this picture, but it cer-



William Henry Fox Talbot from a daguerreotype taken by Antoine Francois Jean Claudet about 1844.



One of a series of pictures of clouds and trees taken by the late Alfred Stieglitz, Hon. FPSA.



Crimean War View by Roger Fenton. Courtesy of George Eastman House, Inc.

tainly stimulated interest in the consciously pictorial use of photography.

Seeking a somewhat more convenient method of producing large photographs, Henry Peach Robinson developed an improved system which required that only two or three enlarged positives be fitted together. Further improvement later was made by combining the separate negatives into one single master negative. Eventually, the perfecting of the bromide enlarging process supplanted these cumbersome operations.

Photographic progress from 1870 to 1890 was chiefly in the technical phases. It consisted, mainly, in the evolution of the gelatine dry plate and research for dyes to produce increased color sensitivity. Not until the years immediately preceding 1890 did pictorial work give evidence of advancing, or even start to show signs of really increased activity. This was not, however, an idle period. The photographic great destined to activate the art were growing up, developing their techniques, acquiring experience. Among them was Alfred Stieglitz, who, study-

ing in Germany, returned to New York in 1890 to initiate his great work of creating an American school. His ideas, then regarded as revolutionary, achieving something less than a sympathetic reception at The Camera Club of New York, Stieglitz gathered about him a band of brilliant camera workers to found the Photo-Secession.

Similarly, a revolutionary spirit developing in Britain culminated in a number of prominent pictorialists breaking away from the parent Society and forming a new group called "The Linked Ring." This loosely knit brotherhood established "The Salon of the Linked Ring" and met once a year for a fraternal dinner. Leaders of the movement included Henry Peach Robinson, George Davison, James Craig Amman, Alfred Horsley Hinton, Alexander Keighley, Robert Demachy of France, Heinrich Kuhn of Austria, T. and O. Hoffmeister of Germany, and Alfred Stieglitz of America.

The outcome of these revolutionary episodes appears to be that photography acquired a soul. At least, from

this particular time on the inner spirit was the inspiration. No longer did the object depicted or the materials used matter so importantly. We can find the beginning of the new spirit, certainly in British pictorialism, marked by the picture, "The Onion Field," by George Davison.

George Davison was secretary of the Camera Club, later appointed by George Eastman as the Kodak Company manager in England. His epochal photograph was exhibited by the Photographic Society in 1890 as "An Old Farmhouse." The title subsequently was changed.

Materially and spiritually, the new movement wrought tremendous developments. New printing methods were introduced to give workers some measure of control over results. There was great gain on the subjective side in the hands of those with the necessary artistic taste, less happy results from the unskilled.

This great stimulus to pictorial photography almost immediately was extended by an exhibition of American work, also of the new school, brought to England by F. Holland Day, of Boston, and his cousin, Alvin Langdon Coburn, and displayed in the house of the Royal at 66 Russell Square, London. Stimulation reached almost to the point of exaltation and, probably, its climax, about 1909 and 1910 with the famous exhibition at the Albright Gallery in America and the Secession Exhibition in London. Thereafter, enthusiasm waned. The "Linked Ring" dissolved. Its exhibitions, after brief interregnum, became the London Salon.

Then came World War I. Photography, except for wartime and scientific purposes, came to such a complete standstill that when in 1923 I gave my address as president of the Royal, taking for my theme "The Developments of Pictorial Photography," I was constrained to

admit that the art definitely was at the crossroads, asking and wondering: "Whither next?"

When, after the war, we were able to resume peacetime pursuits in normal manner, it became apparent that in the arts, as in other walks of life, a new generation was influenced by an entirely different mentality and outlook. There seemed to be little connection with the traditions of the past. Once again we had, not evolution, but revolution.

Youth made extravagant claims to leadership, encouraged by a press which appeared to seek only sensation. The rapidly-growing influence of the motion picture with its novel viewpoints and sensational photographic stunts added impetus. The "New Realism," born of Germany, came on the scene, became "The New Photography," finally arrogated to itself the title, "Modern Photography."

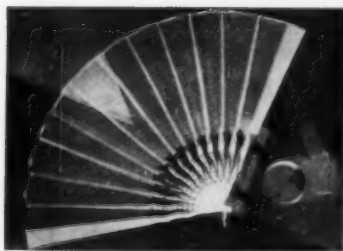
Still another contributory cause may be traced in these extremist developments. The miniature camera, with its ultra-rapid lens of short focus and great depth of field, made possible the photography of a great many subjects previously outside the scope of the large camera. The miniature's very lack of a rising front, for instance, involved those distortions of perspective so offensive to older workers, yet often claimed as a virtue by the miniaturists.

Photography, being graphic art, naturally is influenced, if belatedly and unconsciously, by what is happening in the sister arts, drawing and painting. First symptoms of what was impending appeared in 1908. In that year Malcolm Arbuthnot exhibited in the "Salon of the Linked Ring" two pictures which excited considerable controversy. Being a close friend of Arbuthnot, my recollection



THE BATHERS

M. Arbuthnot



PHOTOGRAM

Man Ray



BEHIND THE SCENES

P. Dubreuil



"Dawn and Sunset" by Henry Peach Robinson. Courtesy of George Eastman House, Inc.

tion is that these photographs were the product of no convictions or theories on his part, but actually were in the nature of stunts to attract attention by deliberately shocking the public and the orthodox photographers.

Advertisement rather than propaganda, Arbuthnot's pictures, including "Bathers," appeared to the photographers of the time as insults to serious photography. None viewed them, then, as portents. Nor did Arbuthnot's example lead to any immediate results. Whatever it was that inspired him evidently was symptomatic of something slowly developing in men's minds and not yet come full to birth. Perhaps some indication of the influence and thought processes and their results may be found in the "Photographic Journal" for April 1932.

In any event, something of the same spirit was making itself felt on the continent. Pierre Dubreuil, of Lille, was, to the best of my recollection, the first to give this spirit tangible expression through his "Elephantasia." It made a strong impression on the 1911 London Salon.

About the same time, a parallel development was revealed in America. Paul Strand, of New York, laid great stress on objectivity as photography's prime function.

Then he proposed an idea which, later, was to assume great importance—exploitation of pattern not merely as a part of design, but as an end in itself.

From this idea derived the development, mainly in Central Europe, of pictures composed of little but repetitive design. Strand probably was the first to express in definite terms the new views of photography and its functions. In 1917 he stated, in an article in "The Seven Arts," that after 10 years of experimentation he had come to the conclusion that "photography, which is the first and only contribution thus far of science to the arts, finds its *raison d'être*, like all media, in a complete uniqueness of means. This is an unqualified objectivity. . . . This objectivity is of the very essence of photography, its contribution and, at the same time, its limitation."

In other—and plain—words, Strand insisted, as did also the Germans some 10 years later, that photography primarily is a recording medium. That is its sole function, and the making of pictures is no legitimate part of its being. That is, we may assume, the point from which the "New Photography" starts.

Several other—and more questionable—developments speedily sought to attach themselves to the movement. From 1914 to 1918 the war had a deadly effect, but fresh impetus was given to the new photographic ideas by the publication in 1926 of Renger-Patzsch's book, "The World Is Beautiful." Renger-Patzsch believed wholeheartedly in the objectivity of photography. He aimed at the utmost realism. No object in nature was too ordinary or too commonplace to serve as subject for his camera.

Gradually the "new photography" assumed many different forms in the hands of those who sought to profit by the notoriety which the new movement promised. Much of the work can have no claim whatsoever to classification with the "New Realism," which was the core of the movement. Yet, since they were novel and sensational, the lay, or non-photographic, press lumped these pictures together as "The New Photography." Actually, there were many variations.

Some were influenced by Pierre Dubreuil, whose "Behind the Scenes" is typical. Usually, the leading feature is some exaggerated foreground object, such as the scroll of a violoncello. The background is more or less related to the principal subject. The theme is capable of endless varieties.

Then we have the exaggerated viewpoint, as illustrated by Maurice Tabard's "Auto." Such exaggerations, being new, were hailed by the lay press as phenomenal achievements. Really, their only claim to attention is novelty, a perishable asset which leaves this type of picture without durable quality.

About this time an American painter and photographer in Paris, Man Ray, discovered a dodge productive of

novel effects. Generally known as solarization, the technique ingeniously could be employed to produce a mixture of positive and negative effect. The result is of no particular value except that it is puzzling, and therefore intriguing, to photographers naturally interested in how the effect is achieved.

Man Ray exploited still another idea, to which the name "photogram," has been given. Various opaque and semi-opaque objects are placed upon a sensitized surface, which then is exposed to light. The result is a sort of shadow-picture, somewhat of the nature of a still-life composition, in the production of which neither camera nor lens is used. The technique has considerable possibilities, but also limitations.

The frenzied seeking for new viewpoints which characterized the period produced such results as "Perspective," by William Rittase, of Philadelphia. It was a time when stunt photographs were all the rage. Press photographers exploited views from every possible—and impossible—angle in their search for novelty.

The "new photographers" appeared to believe that anything on a truly horizontal or vertical plane was too commonplace to be considered. Deliberately they must shoot vertically upwards or downwards. Everything must be tilted. For my part, the picture of a dog poking his head from a window would lose none of its effect were the lines of the window parallel to the sides of the picture. However, the "new photographers" insisted that we should behold a topsy turvy world, in which both window and dog must lean.

Even more extraordinary, although less legitimate, effects were obtained by means of photomontage. Some



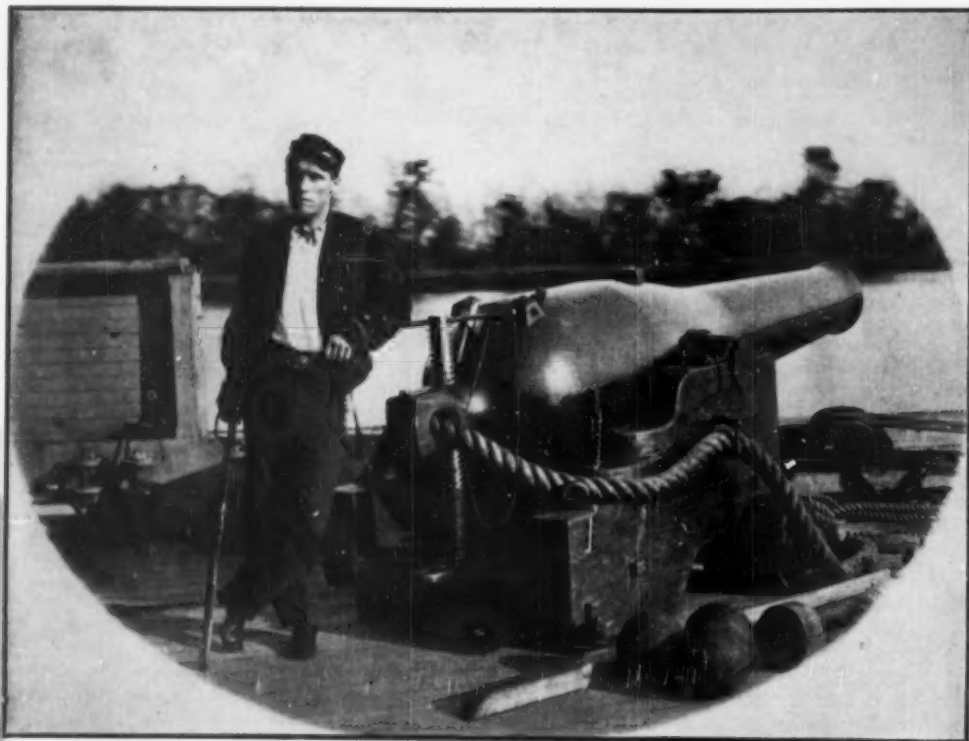
DUTCH CANAL

J. C. Balkin



SPRING IDYLL

Alexander Keighley



One of Mathew Brady's Civil War scenes. The captain of the gunboat *Hunchback* stands next to one of his guns. Brady's Union Navy pictures are rarer than the portraits and battlefield shots.

of these works had perceptible meaning, others apparently no meaning at all. Few aimed at increasing the artistic value of the picture. These products, seeking chiefly to tell some sort of story, really belonged in the domain of literature. They convey a message by pictures instead of words. This striving for effect has been labelled "Expressionism," and never has had much success because so obviously it tries to stretch the medium of photography beyond its legitimate function.

I cannot say whether Renger-Patzsch subscribed to the German theory about photography having no pictorial functions. So far as I know, he expressed no opinion either way. Still, his practice indicates that he regarded photography as a medium for "reporting." And he seems to have given writers on photographic subjects a fashionable cliché, for they brought "reporting" and "reportage" into use.

Both words mean, fundamentally, delineating or transcribing with literal precision. One of Renger-Patzsch's photographs which achieved world success is that entitled, "Shoe Trees," made in a bootmaker's shop. It is a model of good technical photography. It cannot be said to display any special qualities of vision or selection. It is a plain straight-forward record of a ready-

made subject. The lay press acclaimed it is a stroke of genius. I would estimate that nearly half the illustrated papers of the world published it.

Renger-Patzsch introduced also a new conception of landscape photography. He did not normally see a landscape as ordinary people see it. Arbitrarily he selected a small portion of the landscape and recorded it on a relatively large scale. He may have incorporated a certain amount of pattern or rhythm, but little that can lay claim to beauty. Still tree trunks and bark meticulously are reproduced and entirely photographic. Later, Renger-Patzsch seems to have incorporated in his landscapes more of the pictorial, and even something of the quality of mystery.

Of all the pattern pictures of the period, that which made the more enduring impression possibly was "Oil Ditch," produced in 1928 by a Japanese photographer of Los Angeles, by name Uyeda. Whether it was a lucky snapshot I have no knowledge. Neither before nor since have I come across any work by this photographer.

Strangely enough, little has been written about this revolutionary movement in photography, either by way of tracing its origins or analyzing its aims and achieve-

ments. However, in "Photo-Auge" in 1928, Franz Roh, of Munich, a well-known German writer, championed the new school, even proclaimed its aims and methods. He divided the application of the new photography into five categories.

First, and most important, is what Roh terms the "reality photograph." This is, evidently, plain, straightforward photography of objects seen in nature and made with the utmost realism the medium permits. Included are portraiture, figures, landscapes, still life, and every subject in the world about us. In other words, this is what Paul Strand referred to as "Objectivity."

Secondly, we have the photogram, a small class scarcely worth mentioning. Thirdly, comes photomontage, or the combining of parts of different photographs to make a picture, which is extensively used in commercial and advertising photography and, especially, for photo-murals. Fourthly, there is "photo with added drawing," and fifthly, "photo in connection with typography," used for catalog covers, posters, and the like.

Since there is, actually, little to differentiate between the third, fourth, and fifth categories—at least one of which may have only slight connection with photography—and the second category, photograms, is of little general interest or use, here we may concern ourselves only with the first category, "reality photography." Roh contends that this new realistic view has advanced photography by adding new objects to its sphere of interest. This, he avers, constitutes an element of progress.

Since Renger-Patzsch and the others find nothing too commonplace or insignificant to photograph, undoubtedly

they have broadened our views as to what are legitimate subjects for camera recording. Roh says that, additionally, the new uses of photography's resources enable us to see old things in new aspects, so that we have further pictorial resources.

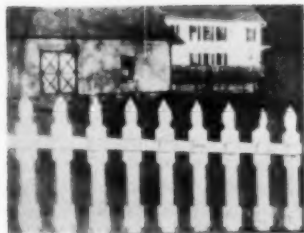
"Whereas," he comments, "formerly it was fashionable to clothe everything in mysterious gloom, today everything is brought out sharp and clear. New attractions can be found in ingenious manipulation of the focussing and by the super-imposition of two exposures on one plate." Many of us have before gone home with two pictures on one plate, but it certainly needed Mr. Roh to inform us that there was any possible virtue in it. Mr. Roh continues:

Another addition to our resources is a new view of perspective. Formerly all pictures were taken on a horizontal basis. The bold viewpoint from above or below had not been explored sufficiently. The rapid changes of position given to us in modern times by elevators, airplanes, etc., have suggested further possibilities, and photos of today are showing appreciation of these up and down views. The taking of vertical lines obliquely is stirring. Vertical in the wider sense is really radial position relative to an imaginary center of the earth.

Whatever that may mean! Of course, all truly vertical objects are radial to the center of the earth. They cease to be so if they are represented obliquely. This attempted justification of certain modern methods of photographing seems to me just so much "hot air."

Another variety of the "reality photo" which Roh commends is the negative print. He says:

The principle of inversion is well known in the arrangement of abstract forms. Why should not the same principle be applied



DESIGN

Paul Strand



ARCHITECTURE

W. M. Rittase

to external realities? Besides the inversion of direction, an inversion of light and dark is also possible and has certain specific charms.

The answer to this surely is that it would be all right provided the photograph had no other aim or meaning than to make a more or less pleasing arrangement of shapes and tones. If, however, we are representing something in nature, a negative presentation is obviously nonsense.

One of the most eminent European photographers of the early part of the century, Heinrich Kuhn, of Vienna, wrote an introduction to the 1930 German annual of photography, "Das Deutsche Lichtbild," in which he analyzes and, to use a current slang expression, debunks this modern movement.

"Modern photographers," he says, "assert that photography has sought pictorial effects only by imitating painting."

I think that no justification for a general statement of this kind can be found, and Kuhn does not uphold it. It is true that some photographs made by controlled processes, like gum bichromate and bromoil, do show some slight superficial resemblance to the products of other graphic arts. That is inherent in the nature of the photographic printing process employed and need not be a conscious imitation of the painted picture. For instance, a gum bichromate print by James Batkin, one of the most eminent photographers of the Birmingham school in the first decade of the century, is purely photographic. Yet it might well convey to anyone unfamiliar with photographic processes the impression of a wash drawing. And Kuhn goes on to say:

It remains a moot point whether all those who photograph machines, piles of boards, comestibles, bridge piers, fishing nets, staircases, kegs, textiles, ornaments, or other man-made products, really know what they want. Their chief desire is to produce something novel, something simple, natural, and boldly selected from objects of everyday life.

This type of subject is chosen mainly for lights and shades hitherto ignored by the average photographer. It requires considerable taste to deal artistically with such pictures. The sun is able to beautify the most tumbledown tenement and the cast shadows of boxes of matches can supply a design for textiles or wallpaper.

The new movement aims at much and attempts much. Nobody will deny its educational value, both to the photographer and to the public. But was not this always applied to photography? The more we go into the matter the more we realize that formerly photographers had higher aims, namely to penetrate below the surface of things without endeavoring to overstep the limits of photography. It is below the surface that the greater values are to be found.

I believe that the movement has certain virtues for which credit must be given. Apart from its educational value in teaching the unobservant to appreciate the marvellous details of nature's handiwork, it has been a contribution to the progress of photography by its insistence on technical perfection and that superficial beauty we call "quality." Moreover, by its demand for straight photography it has restored photography's belief in its own powers as a medium of expression. It has dis-

couraged any tendency toward imitating the external appearance of the painted picture of which critics sometimes have accused us.

I believe I used to be considered hostile to the modern movement in photography. It all depends on what is meant by "modern photography." As photography, pure and simple, I am all in its favor. It advocates the highest possible degree of technical skill and the use of straight photography—and that is all to the good. But if these advertising stunts are put forward as "modern photography's" finest flowering as pictorial art, I am all against it.

I admire all good photography that records so marvelously the facts and beauties of Nature and of Nature's workings. But, as a pictorialist, I feel that there is something finer possible than the mere recording of facts and details, be they done never so beautifully. We have within us the aspiration to appreciate and to create beauty. Not the beauty of literal facts, but esthetic beauty, which is linked with the imagination and the intellectual faculties, and not merely with the perceptions.

To present this beauty adequately it is necessary to employ artistic methods which are the result of centuries of trial and experiment and which form our pictorial tradition. The result is a picture. The subject matter may be as modern as you please—there is no limitation in that respect—but the putting together of the material must conform to the broad principles of pictorial art if it is to be satisfactory. It is precisely because these considerations are not observed by modernistic photographers, either intentionally or from ignorance, that I find their efforts unsatisfactory as pictures.

The "modern" is making no attempt to produce something of orderly beauty, but to startle you or to attract your attention with something novel or striking to the eye. The spirit in which these things are conceived is that of the poster or advertisement, not of the picture.

What, then, has been the effect of all this after the passing of another 20 years? Do we at the present time discern any elements of progress? Here in Britain the leaders of pictorialism have gone serenely along traditional lines. It cannot be said that there is much inspiration or depth of feeling to be found in their work at the present day. It is eminently respectable, sound in technique, and perhaps somewhat formal as regards composition, but not informed with profound vision.

We are still not only in the aftermath of a great war, but in the throes of a vast social revolution. For the time being all values are in the melting pot. What will come forth is still uncertain. The spirit which animated the modernistic movement is still operating among photographers today, but mainly as an endeavor to get away from the traditional ways of looking at things. The seeking for realistic presentation fostered by the detail-giving powers of the precision camera is the principal aim of their picture-making. The machine is triumphant, but the spiritual content has been lost.

"What shall it profit a man though he gain the whole world, but lose his own soul?"

Children at Play

KAY SIMMON

CHILDREN are little people of many aspects, and there are many ways of picturing them. You can photograph them all dressed up, smiling at the camera, and very charming pictures can result. However, the most genuine and revealing portrayals of their personality are produced, I believe, by showing children when they are busy at play.

My photographs of children are taken with the purpose of showing what the child is like and pleasing its parents, who pay me for doing this. Many parents have come to realize that a more honest portrayal of their youngster is achieved when he is not aware of the camera but is lost in his own activity. I myself prefer this type of photography, although I realize, of course, that there is a definite place for the more formal "portrait" type of picture.

Play to a child is as serious as work is to an adult. He becomes absorbed, he forgets the world around him, and above all he forgets about the camera and other equipment that may be used. That is important, because self-consciousness and "posing" starts to plague us very early in life, although children are, fortunately, more easily lured out of it than adults. Thus when an interesting situation or activity is presented, the child will almost automatically enter into it wholeheartedly, and the time has arrived to take pictures that convey more than a posed likeness.

All this may sound a bit easier than it really is. There are, after all, two factors to which the child is reacting: the play at hand, and the presence of the photographer. The youngster's attention may change focus from time to time, but these two factors are always present. That is why the attitude of the photographer toward the child is of the utmost importance. First of all, he must *like* children. Like dogs, youngsters seem to be able to sense sympathy or suppressed antagonism. But more than that, a respect for the child's individuality is important. These are intangibles, but they are fundamentally important, and I doubt that they can be acquired consciously . . . but the child will know whether they are there or not.

Once the youngster has entered into the spirit of his play, I find that it is best to let things take their own course for a while, and to minimize my own presence as far as possible. I try to be quiet and unobtrusive, at the same time keeping alert to any signs of fatigue on the part of the child. Depending on the age group, one must be able to judge the attention span of the child and intro-

duce new play material before he loses interest and decides to ride away on his tricycle. Here the problem is to direct without imposing one's will—a delicate operation that depends a good deal on intuition.

The types of activity depend, of course, on the age of the child, although there are some play materials of almost universal appeal. Crayons, clay and blocks belong among these. While nearly all children find these stimulating, they will use them in very different ways at different age levels. Books are a constant source of delight to most kids, especially if they are new books with pictures they have not seen before. As they get older, they can use more intricate tools, such as scissors for cutting out pictures, sewing cards for little girls, or small tools for boys. The important thing is that the play be absorbing so that they can lose themselves in it for a while. It is, incidentally, a sound idea to make sure that the objects are recognizable, so that the viewer knows what the child is doing when looking at the picture.

Whatever the particular play, whenever possible I like to include the child's hands in the picture. First of all, youngsters' hands are extremely beautiful and expressive. But more than that, they are frequently the only clue to the child's age. It is often difficult to tell from a head shot whether a child is five or nine, particularly if the

At seven, this little girl uses her crayons for elaborate drawings of the world around her, giving the photographer plenty of time to catch a characteristic pose.





Note the graceful way in which this three-year old uses his hands while playing with his little wooden train, a recent acquisition.



Feeding the baby, in strict imitation of Mummy, is fine picture material. The young lady is obviously pleased with herself.



The real things around them are a constant challenge to children. This one is experimenting with putting on her own shoe.

youngster is an unusually bright one. The hands, however, will nearly always give away the age, first because of their physical appearance, and then because there are characteristic ways in which children use their hands at various age levels, starting with the poking of the ten-months old to the sure, deft manipulation of the school-age child.

A word here on behalf of honesty. When I speak of child activities, I emphatically mean those in which the child would normally engage, not phony ones that are obviously set up for the camera, such as a two-year-old at a full-sized sewing machine. Such pictures are merely "cute" and not honest portrayals of childhood.

The kind of photograph described so far is almost always taken indoors, within a limited area. This by no means indicates that good pictures of this sort cannot be taken outdoors, although it is a good deal more difficult. First of all, there is the matter of illumination. Unless one works with flash, which is bothersome and at times detracts from the naturalness of the setting, we depend on the position of the sun, and children are not concerned with the best angle for pictures when they are busy at play; they are very apt to show their best expressions at a moment when the lighting is worst. In addition to this handicap, there is the irresistible urge to roam around in the great outdoors, and the photographer will get a good workout just running after his little subject. However, given enough time and energy, it is certainly possible to achieve excellent pictures outdoors when the children are engaged in their more active forms of play.

A word about technique: I work with a Rolleiflex, using fast film. My illumination consists of from two to five No. 2 photofloods, depending on whether the pictures are

taken on location (where more than two floods may mean a burned fuse) or at the studio. I have no pet theory about lighting, but like to light a limited area in such a way that the child can move around within it and be photographed at almost any angle. I try to keep my equipment as simple and flexible as possible, for fear that otherwise it will interfere with the spontaneity of the pictures. For this reason I do not use a tripod, working usually at 1/100 sec. with the shutter at f/4.5.

And a word about my attitude toward photography: I belong to no school of isms, advocating this or that approach to photography to the exclusion of all others. There are many facets to the medium, and it is the individual's prerogative to select the one that suits him best at the moment. In the pictures which I take as a camera club member, of subjects other than children, I feel free to pursue any technique that strikes my fancy. However, as a professional photographer of children I feel that my purpose of an honest portrayal of children is best served by the straightforward use of the medium. My prints, therefore, are straight prints, without the use of so-called "control" methods other than some dodging and spotting.

In conclusion, I feel that, while posed portraits of children are often pleasing and charming, a more revealing and meaningful sort of picture is produced by portraying the child in an activity that is natural to him, thus bringing out more characteristic expressions than a conventional camera portrait. Achieving this result involves, I believe, a working knowledge of child psychology as well as an infinite store of patience and sympathy for the little people who come before our cameras.



SUE

HAL REIFF



Rolling Down the Green

A RECIPE FOR HIGH ADVENTURE WITH A MOTION PICTURE CAMERA

VINCENT H. HUNTER, APSA *

HERE'S a recipe for high adventure: Take two well-built cataract boats, add six men including two who know both the river and the boats, half a dozen assorted cameras, plenty of grub and sleeping bags and about eighty miles of the famous Green River in Wyoming and Utah. Blend thoroughly with a day in June and flavor with those high-riding clouds floating overhead in the blue, and adventure commences.

We had planned the trip for several months so everything was well coordinated when I swung off the train in the little sun-baked town of Green River, Wyoming. I was greeted by Bill who had arrived from the east only a few minutes before, A.K. and Mike, the boatman, Lug, a husky young man, also a boatman and Adrian, A.K.'s river-smitten father—altogether as fine a crew as you would want to run any river.

Equipment

Bill and I were well-heeled with cameras. I had a $2\frac{1}{4} \times 3\frac{1}{4}$ and a small reflex camera for still color shots plus the Cine Special and a Bell and Howell 70DE for motion pictures. Bill had his trusty Graphic for black and white pictures and a twin lens reflex for color shots. Adrian added a couple of additional still cameras to complete our shooting equipment.

We couldn't wait to see the boats so the boys whisked us off up the hill to the Reynolds' home where the two glistening white cataract boats reposed in their well padded cradles on the trailer. With an eye to color photography, A.K. and Mike had trimmed the boats in red, and large red letters on the side of each craft announced "REYNOLDS-HALLACY EXPEDITIONS," this being the name which A.K. and Mike had selected for their river running project.

The boats were beautifully constructed of marine plywood with white oak ribs. They were about sixteen feet long with a beam of almost five feet. The flat bottom rounded more toward the square stern than it did toward the bow and was covered with oak strips to give protection from sharp rocks.

The boatman plied his art in the cockpit in the center of the boat. The fore and aft compartments, reached by hatches in the deck, were water and air tight and offered not only generous storage spaces but added to the buoyancy of the boat.

* Chairman, PSA Motion Picture Division.

Early next morning as the sun slid over the sandstone bluffs we rolled out of Green River on our way to a point some fifty miles down stream where we planned to launch our boats. We made a slight detour to the island in the river where a monument marks the historic spot where Major John Wesley Powell and his party started their legendary trip down the Green and Colorado Rivers in 1869. Here Bill and I made our first pictures and the trip was declared officially under way.

The Launching

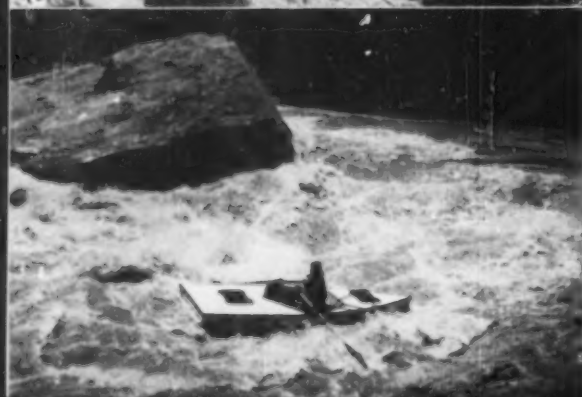
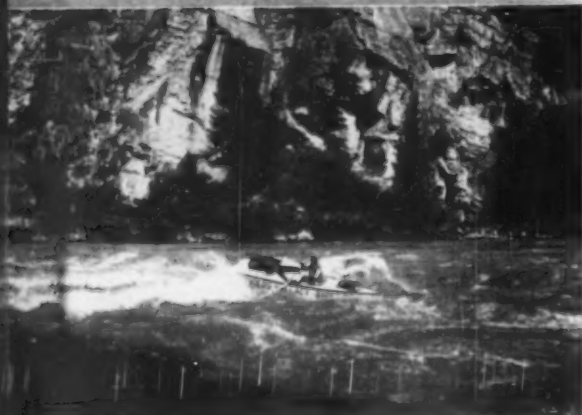
At a beautiful spot where the Green River flowed through a green meadow we launched our boats. Supplies, camping equipment and cameras were stowed carefully in each boat. While this process went on Bill and I were busy making pictures for the record. We made no attempt to pose anybody but merely shot "on-the-run," taking what the opportunity afforded. If we sacrificed something in lighting in some of the pictures, we more than made up for it with the feeling of reality and sincerity imparted by photographing things as they occurred.

We were fully determined that we would get a good photographic record of our boat trip adventure without turning the job into photographic drudgery. I have seen many capable photographers so busy making pictures they were unable to enjoy any scenery first hand.

With everything stowed aboard we waved goodbye to Mrs. Reynolds who had come along to drive the station



Start of the expedition down the Green River.
L. to R.—Vince, Mike, A. K., Lug, Adrian.



wagon and boat trailer back to Green River. She would meet us four days later some seventy-five or eighty miles from our embarking point.

I made several shots with the "Special" on the tripod from the shore as the boats swung out into the current. Mike pulled into shore below to pick me up and we were really on our way.

The boats rode buoyantly on the water. Bill and Adrian were with A.K. while Lug and I held down the stern on Mike's boat.

We drifted around the bend and into the first canyon. The river ran at a leisurely pace. The sun beat down on us and we relaxed on the stern decks. This was really the life. Occasionally Bill would stand up in the other boat to shoot a scene which intrigued him. I found it necessary to switch to a wide angle lens to bring in the tops of the cliffs. The cliff walls of creamy white and yellow sandstone bounced the light around so well that I found I could shoot in any direction at an opening about one third of a stop smaller than $f/8$. Since the action was restrained I figured that 16 frames per second would give me pleasing results projected at 24 frames.

All day we drifted with a constantly changing panorama unfolding before us. The river meandered so that we occasionally drifted for an hour or more without gaining more than a quarter of a mile air-line.

At the first sign of approaching dusk we hauled the boats out at a spot rejoicing in the unromantic name "Nelson's Flat." A roaring fire to combat the evening's chill, a hot supper and a good night's sleep put us in fine shape for the next day. We rolled out early. Lug cooked breakfast and he did not ask any questions. He simply cooked three eggs for each man and passed them out with no comment. Of course, there was plenty of bacon and other "fixins."

With every camera loaded we shoved the boats into the current. Around the first bend we were confronted by the famous Kingfisher Canyon named by the Powell expedition. If there were any rapids in the Kingfisher we did not see them. Since the river was in high stage many troublesome rapids were safely buried under ten or twelve feet of water. The pace was not appreciably different from the day before. Bill and I decided we would start holding back photographically in expectation of great things to come. I think A.K. must have divined our thoughts because he said with a grin:

"Don't you guys worry—there'll be plenty of wet shirts in this outfit before night."

About noon Bill and I went ashore and hiked downstream to a point where a swinging bridge spanned the river. We figured this would furnish an excellent vantage point as the boats swung by directly under us. As we walked out on the bridge Bill cocked an ear. "Listen!" he said.

Top—Into the mouth of the Kingfisher. Second—Roller coasters. Lots of fun without any danger. Third—Ashley Falls from above. The boulder in the center is the size of a large barn. Bottom—A. K. coming through Ashley.

We listened. Far down river we could hear a low sustained murmur. Bill's face crinkled into pleased anticipation. "I guess that is what is referred to generally as a 'sullen roar' but it sure sounds good to me." We waved the boats into action and got set to shoot. I speeded the camera up a little to 24 frames in order to hold the scene on the screen longer so that the details of the boats might be seen.

Below the bridge we embarked, but after a short run A.K. ordered a lunch stop. We cooked hamburger steak and fried potatoes with the roar of the rapids loud in our ears. After lunch we ran about a quarter of a mile and then pulled into shore and tied up.

The First Rapid

Hiking down stream we got a good look at our first rapid. It lay in a slight curve in the river and the water piled up rather vigorously in the narrow confines. Here and there a vicious curl of water betrayed a hidden boulder. But to the boys it was an open book.

Bill and I were determined that we had to ride this rapid. We did not want our baptism delayed any longer. So we prevailed on Adrian and Lug to act as cameramen. I set the "Special" on the tripod at a spot near the end of the rapid and gave Adrian a chance to practice a follow shot. Lug got a short course in handling the Graphic and then Bill and I hurried up-stream to the boats.

"This is only a roller-coaster," said Mike, "but we'll wear life jackets anyway."

We watched A.K. and Bill shove off and disappear around the turn. Giving them a moment or two we shoved off.

In running rapids the boat is kept under as much control as possible. Oars are used only as steering agencies, and the boat, contrary to popular custom, is headed down stream *stern* first. In this way the boatman has a clear and unobstructed view of what lies before him and the square stern with its upswept bottom serves to beat down some of the combers.

We shot around the turn into the rapids. While we were not actually going very fast the impression was of express-train speed. I got some short bursts with the Bell and Howell but part of my attention was given to staying with the boat. It would have been no trick, of course, had I not been taking pictures. I had a confused impression of Adrian hunched over the "Special" then we were through and into the slack water. Bill and A.K. were tied up to the bank and we held "old home week" over our first rapids.

"How did you get along?" I asked Adrian as he and Lug came in with the camera equipment. He grinned. "I got along alright but by the time you came by me I was wound around that tripod like a pretzel. There's more to using a tripod on fast follow shots than meets the eye."

Carter Creek Camp

By the time we pulled out the boats that night at Carter Creek we were confirmed river rats. The lure of the river—the murmur of the current—the roar of the rapids—



Roller coasters—you get wet, but it's fun!

was no longer an intangible thing. It was very real to us even though we could not seem to find the right words to describe how we felt. The other four knew what had hit us. It had hit them a long time ago.

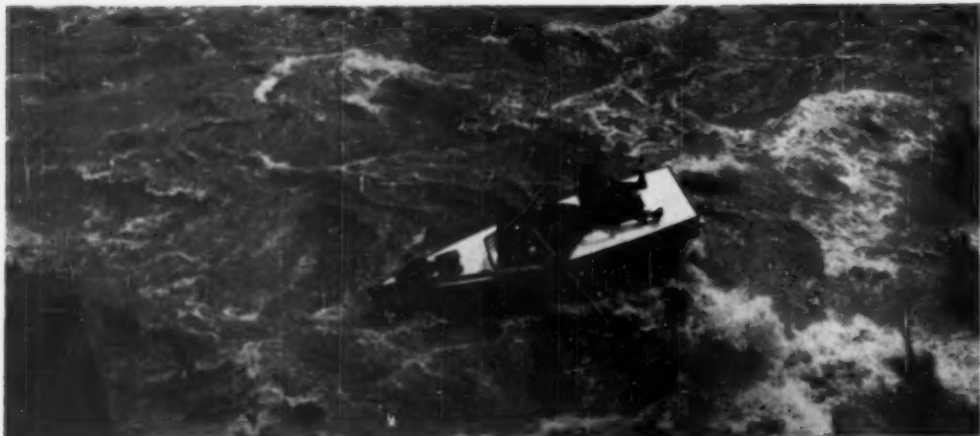
At Carter Creek I made several sequences on camping. Lug fixed up a steak feed and this made good cinematic material. Mike had to careen his boat to repair an oak strip that had brushed against a rock and this made good material too. Later, by the light of a roaring fire, I tried some close-up portraits of the boys at eight frames at $f/1.4$. It later developed that these worked out very well with the exposure a little on the slim side.

The next morning I got up early before anybody stirred. As the boys awoke I got a series of "candid" waking-up shots. There were vague mutterings about "invasion of privacy" but no open rebellion.

As Lug cooked breakfast I poked the camera in close and got shots of frying eggs, making coffee and similar scenes around the campfire. Later, when he got the pancakes department working, I shot this phase of culinary effort by using the single frame lever. Making the necessary exposure compensation, I clicked the single frame lever at the rate of about two or three frames per second. This produced a unique, not to say hair-raising, episode

Vince shooting camp activities.





A. K. with Vince on deck running Red Creek Rapids.

of pancake making on the screen. A gag like this is always good for a laugh—even while you are making it.

Once more we swung the boats into the current. There was a different feeling this morning. The river seemed different too. It was in a hurry now, impatient to get on its way to the juncture with Colorado River waters far below. White-whipped water was the rule now rather than the exception. The boat pitched and bucked, and it was necessary to shoot at 32 frames to smooth out the action a little. Of course, we were soaked to the hide. Lug and I were riding A.K.'s boat now and his philosophy was—"A wet passenger is a happy passenger." In this case he was right too. We yelled like Comanches every time a big one came aboard. It was great sport.

I had to be careful to slip the lens cap over the lens before we got ducked. Since I was shooting Kodachrome Commercial, I had compensating gelatine filters over the lens and a drop of water would have meant the bothersome job of cutting new filters. Later I moved the filters behind the lens in the Bell and Howell, and while I have heard that this lessens definition, it does not seem to work out that way from a practical standpoint.

So we went rolling down the Green all morning, as care-free and joyous a crew as you would find anywhere. We had long since dispensed with shirts as being just one more thing to get wet. Thanks to the sun and the developments of modern science our hides were fast taking on the color of an ancient saddle. The complex ramifications of modern living seemed a long way back in the past.

Mike had worked his boat on down the river ahead of us, but swinging around a curve we found him in a big eddy. He looked a little silly and yelled that he was making his third trip around. He was trying to make shore but the back current would send him up-stream and before he could get out the river caught him and sent him down stream. It is like being caught in a revolving door that is going too fast to permit you to leave.

We gave up trying to make shore here and headed in down river where we loaded cameras again in the welcome shade of a giant boulder. I was always careful to go ashore and find a shady spot to load, being well acquainted with the anguish which accompanies light struck film on your choicest scene.

Here I switched to Mike's boat so I could get some shots of A.K. in rough water. At times his boat would go out of sight behind a big crusher.

Ashley Falls

About ten-thirty A.K. waved us into the left bank. When Mike saw him he said: "Ashley Falls. We've got to scout it."

We had heard a great deal about Ashley Falls. Named after General William H. Ashley, of St. Louis fur trading fame, the falls was not exactly a conventional water fall. It was the surge of wild water around a tremendous boulder in midstream coupled with a drop of about twelve feet. Some other assorted boulders created treacherous cross-currents, and all in all it was "good" water to satisfy the most ambitious river runner. Certainly General Ashley was entitled to have this place named for him because he ran through here in 1825 with six companions in two bull boats—boats constructed of wood covered with buffalo hides.

At that time the Green River, called by some the Spanish River, was the mecca for American trappers. On its tributaries they trapped for beaver and lost their "hair" to hostile Indians. "Rendezvous on the Green" was the annual gathering of the trappers, when in a few short days of roistering and gambling the hard won proceeds of the previous winter's trapping were dissipated.

General Ashley had painted his name on the rocks at the falls but we were unable to locate the faint tracing. Time may have completely obliterated it. Major Powell saw it when he came down the Green in '69. We saw

names of a number of other expeditions painted on the rocks and added our own for good measure.

We could see the boys had considerable respect for Ashley Falls. Many boats had been stove to pieces in those treacherous waters and they meant to take no chances.

While the boys conferred on the best way to run Ashley Falls, Bill and I discussed our problem. We wanted to go through Ashley on the boats the worst way, but we realized the wonderful picture possibilities. Duty finally won out. We simply could not pass up such a picture opportunity.

Since the boys decided to run the left channel we were located just right, and it was a simple matter to spot the motion picture cameras to the best advantage. The "Special" on the tripod was placed on a large boulder well above the river and some two hundred feet below the falls. Adrian was going to "hand-hold" the Bell and Howell much closer to the falls using a 1-inch lens and shooting at 64 frames to give us a slow-motion version of each boat ride. I was tempted to use a 2-inch lens on the "Special," but finally decided that although the 1-inch lens would not give quite as spectacular a result, it would provide a better story telling picture, and I could cut to Adrian's slow motion shot for a close-up. Bill was perched at the brink of the falls with the Graphic while Lug, with two cameras to thoroughly confuse him, was located just below Adrian. We were all ready to shoot.

After what seemed quite a wait the boys drifted around the bend. They were close inshore with A.K. about fifty feet in the lead. This was cutting it a little fine as we would have to wind the camera motors between shots.

Dipping his oars only to keep his boat stern first A.K. drifted slowly to the brink and with a terrific lurch slid over and out of sight in the raging waters. Then, after an appreciable interval, his boat shot out of the flying spray like a leaping torpedo. In a moment he was in the clear and shooting past me with a flash of teeth in his tanned face. As he disappeared around the bend below he was bailing out the cockpit.

By now I had a few quick turns of the crank and Mike was just sliding into Ashley. He took it just a little easier than A.K. but he still went out of sight to come shooting out a moment later with both oars swinging strongly. It was amazing to see how these boats can take it. The buoyancy of the two compartments makes them just like a duck on the water.

We had to hike nearly a mile down river to where the boys had found a place to tie up. There the usual river rats post-mortem was held, and after loading the cameras we continued down river. Bill and I were a little sad over not running Ashley but we were sure we had some spectacular pictures. Adrian was positive he had covered both runs from start to finish in slow motion. A.K. consoled us by telling us we could ride through Red Creek Rapids the next day—the last day of our trip.

Gorge Creek Camp

In mid-afternoon running in a strong current A.K. started pulling frantically for the shore.

"Gorge Creek," he yelled, "Night camp."

We made a rather rough landing about fifty feet below the mouth of the creek. Mike came booming in for a landing and everybody was in the water pulling on lines or pushing on the boat. We finally pulled them up-stream out of the swift water and into the quiet of Gorge Creek. We all sat on the bank getting our breath when I had an idea.

"Tell you what," I volunteered, "Let's take one boat back down river and pull it up again so I can get motion pictures of it. It will make a swell sequence."

Mike cast a wild glance at A.K. "Maybe the trip has been a little too much—" He began—

"No, it isn't that," said A.K. "He's just plain teched. All these camera fellows are that way. You have to be to make good pictures."

Adrian started to pull his wet shirt back on. "Well," he said sadly, "let's get at it and get it over with."

As they struggled with the boat Bill and I shot pictures furiously.

"Remember where you slipped and fell in up to your neck? Don't forget to do it again," I called to Mike.

"What a sense of humor," he spluttered as he dutifully slipped in.

"What a picture!" I replied.

The next morning we broke camp for the last time. Red Creek Rapids was fun and Bill and I got a good dousing, but it was anti-climactical after Ashley. About two in the afternoon we rounded a bend—you are always rounding a bend on a river trip—and there was Mrs. Reynolds with the car and trailer.

The trip was over but we had plenty of pictures to remember it by.

As we hauled the boats out A.K. asked: "How would you fellows like to run Lodore with us next summer?"

How would we like to run Lodore? Bill looked at me and grinned. "Just let us know when," he said. "We'll be ready!"

Bringing in a boat at Gorge Creek.



MASKING—A Useful Tool

LEE A. ELLIS, APSA

EARLY in his photographic career, every serious amateur will see mentioned in the literature the term "masking," not the black paper variety, but *photographic* masking. It may be used in connection with color photography or in some special black and white process—but every so often the term crops up. An amateur photographer is a curious fellow, and mention of a new process or material is very likely to send him scurrying down one of photography's fascinating byways. But somehow or other most of the breed seem to shy away from masking and thus they seldom take advantage of one of photography's most useful tools. There's no mystery to masking, no special equipment needed, and procedures are simplicity itself.

A photographic mask is exactly what the term indicates. It is a photographic image on a piece of film which serves the purpose of holding back the printing light to a predetermined degree from either the entire or selected areas of the original negative. There are two general classes of masks—contact and enlarged masks. Contact masks are taped together with the original negative whereas enlarged masks are placed on top of the paper on the enlarger easel. This article will deal only with contact masks of the following types:

1. Over-all mask
2. Highlight mask
3. Accent mask
4. Shadow mask

Before getting into the details of mask-making, how-

ever, let's look at some "before and after" pictures which will demonstrate graphically the advantageous end-results which can be achieved through masking.

Figures 1 and 2 show the improvement made possible through the use of a negative highlight mask. Both prints were made on No. 2 paper. The mask was clear except over the left-hand tank and had the effect of creating more emphasis in this area, not only by lightening the tank but by increasing the contrast in the left side of the picture.

Figure 3, the over-all, grillwork design, was photographed on a dull day and the resultant print was too flat to be effective. A negative accent mask, Figure 4, was made according to the procedure described below, which, when combined with the original negative, yielded Figure 5.

Before making the positive shadow mask for the negative of Figure 6, every effort was made to dig out the shadow detail by careful dodging. After wasting many sheets of paper, a mask was made as described below with the results illustrated in Figure 7.

The Over-All Mask

The over-all mask is used when it is desired to increase the contrast of the original negative. In effect it adds silver to the areas of the original negative in proportion to the amount of silver which is already present. In this respect the masked negative is similar to an intensified

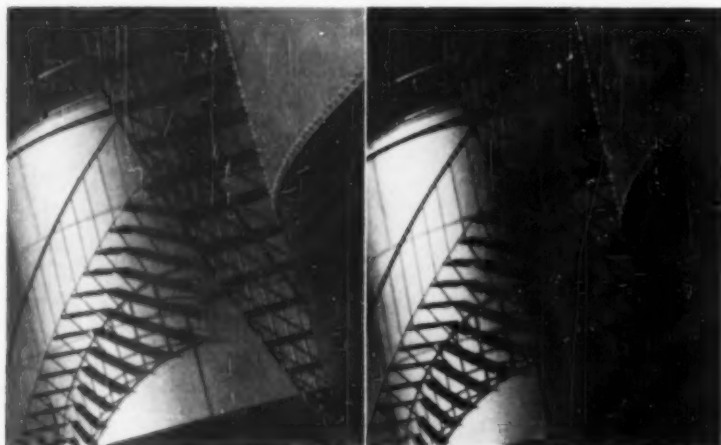


FIG. 1 (left): "Counterpoint"—a straight print on normal paper. The total negative area used was less than one square inch, which discouraged the use of New Coccine. Dodging might have interfered with the smooth transition of lights to darks, so a highlight mask was made as described in the text.

FIG. 2 (right): "Counterpoint" printed with the aid of highlight mask. The only other control used was a flashing of the right side of the print in order to give more shape to the right-hand tank.

negative but the use of a mask provides much better control of the finished picture. In order to add silver where there is already silver in the original negative, our mask must consist of another negative. It is to be a very thin negative, to be sure, with the shadow areas being quite empty. So first we must make a contact film positive, from which the negative mask is to be made—also by contact.

In making this contact film positive, proceed exactly as you would in making a contact paper print except that film is used in place of paper. Most any continuous-tone film can be used, such as Portrait Pan, Iso-Pan, or X-F Pan. It will be necessary, of course, to cut down the intensity of the usual printing light because of the extremely high speed of the film as compared to paper. If it is troublesome to cut down the light intensity to a convenient degree, "Commercial" film may be used to take advantage of the slow speed of that type of film. Commercial film has the additional advantage that it can be handled under a red safelight. Furthermore, it is a fairly fine-grain film, a factor which should be considered when making contact masks.

It will be found quite convenient to place the original negative in contact with the film used (emulsion to emulsion) in a simple contact printing frame and to use the enlarger as a light source. The enlarger lens can be stopped down conveniently and, if necessary, a filter can be used on the enlarger lens to cut down the intensity still further. If your printing frame has white felt backing like mine, it will be advisable to back up the film with a piece of black paper.

The film positive which is being made in this case should be a full and accurate image of all of the detail

which is present in the original negative. Hence the exposure and development should be such as to result in what might be called a normal transparency—such as would look good if projected as a lantern slide. Use your regular film developer and make a test strip to determine the proper exposure.

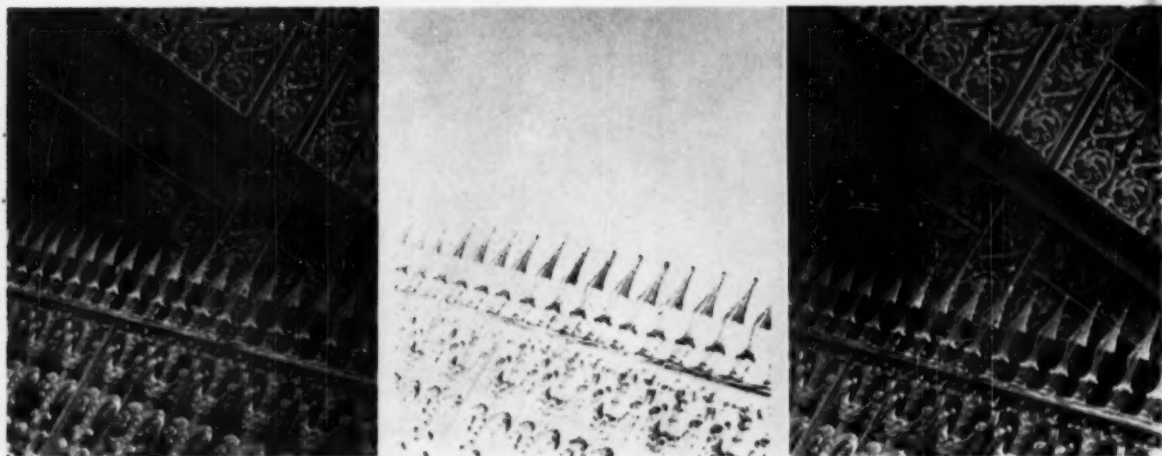
The next step is, of course, to make the negative mask from the transparency. Use the same kind of film and technique as for the positive except this time you should underexpose and underdevelop *radically*. Remember, all you want in this negative is sufficient silver to increase the contrast of the original negative, and it takes surprisingly little silver to do this. The developer for this negative should be very soft—such as your normal film developer diluted three or four to one. The developing time should be cut to one third or even one fourth of the normal developing time. Again, make a test strip to determine the proper exposure time.

After the negative mask is washed and dried, tape it in register with the original negative, place them in your negative carrier and proceed with the enlargement on paper as you normally would. Presto—you now have a contrastier negative!

The Highlight Mask

The highlight mask is useful when it is desired to increase the emphasis on the highlight areas of the subject. It is simply a matter of adding silver to the highlight areas of the negative in order to increase their density, thus extending the tonal range of the negative. The highlight mask is made in exactly the same manner as the over-all mask except that in the negative mask where

FIG. 3 (left): "Staccato"—a straight print on normal paper. Again only a small part of a Rollei negative was used, which, in view of the minute detail involved, made hand-work on the original negative impracticable. FIG. 4 (center): The negative accent mask made from a contact film positive. This, like the positive, was made on Photolith and the mask was completely clear except for the solid highlights shown. FIG. 5 (right): "Staccato" when printed from the combination of the original negative and the negative accent mask shown in Fig. 4. Note how the pattern has been "hopped-up."



you have silver and don't want it, reduce it out locally with Farmer's Reducer. Thus most of the mask will be clear film with only wisps of image here and there, corresponding to the highlights of the transparency.

After the negative mask is washed and dried, tape it in register with the original negative and proceed with the enlargement just as you normally would. Presto again, you have added silver to only those highlights which you want brighter in the final print.

The Accent Mask

The accent mask is the logical extension of the highlight mask described above. It is used where it is desired to block up the highlights in the original negative. As such, it should be used sparingly and only when the loss of detail in the highlights of the final print is desired for a definite effect. Such was the case in Figure 3 where the contrast of the scene was too low to make an effective picture. The accent mask actually has caused the small individual highlights of the scene to be blocked up—with the over-all effect being one of pepping up the scene.

In making the accent mask the film used for the positive transparency should be a high-contrast (line) film

such as Kodalith, Photolith, or Reprolith (which should be developed in D-85 or equivalent) and the film should be overexposed in order that the only clear areas in the positive correspond to the highest highlights of the original negative. All other areas should be very dark. As a matter of fact, all unwanted detail can be removed in this case by opaquing it out on the high-contrast film transparency.

In making the negative accent mask from this transparency, line film should again be used and the resultant mask will be entirely clear except in the wanted highlights which themselves will be absolutely solid. Again, after washing and drying, the mask should be taped in register with the original negative, after which the final enlargement can be made as usual.

An interesting application of the accent mask technique is explained in detail in the May, 1950 issue of "The Camera" Magazine in an article concerning the use of a Combination Negative.

The Shadow Mask

The shadow mask is the inverse of the highlight mask described first and is used where the contrast of the

FIG. 6. "The Winchman"—a straight print on normal paper. The picture should have been made with fill-in flash, but it was a case of "take-it-now-or-don't-take-it." Efforts to bring out the detail in the empty shadow areas by dodging failed.



FIG. 7. The result of combining a positive shadow mask with the original negative of "The Winchman."

original negative is such that it is difficult to show detail in the shadows, even on soft paper. The shadow mask, therefore, will lighten the shadows in the print, leaving the highlights of the scene alone. This then is the case where silver is to be added to the shadow areas of the original negative; therefore, all that is needed is a positive mask to be taped in register with the original negative. This assumes, of course, that the transparency of the shadow areas of the original negative is not so great that there is no detail in the shadows. The detail must be there, but it *can* be surprisingly little.

Using continuous-tone negative material again, as we did in the over-all mask procedure, make an underexposed and underdeveloped positive. Remember here that the only silver you want in this mask is a very flat image representing only the deficiencies in the original negative. After the positive mask is processed (using diluted regular film developer for part-time) the only silver showing should be in the desired shadow areas. If there is silver where you don't want it, again it can be reduced out locally with Farmer's Reducer.

This positive shadow mask is then taped in register with the original negative and the final print made from the combination. Since the positive mask is a flattening mask you may decide at this point to go to a contrastier paper. Use of "Varigam" here appears to offer interesting possibilities.

The Soft Mask

The above covers in general terms the techniques of the four types of masks with which we are concerned. It should be noted that these masks are essentially *sharp* masks wherein accurate registration is an absolute necessity and can be used where sharp lines of demarcation can be tolerated. There are subjects, however, where it is highly desirable to soften the edges of the mask. Such a subject is, of course, portraiture. Use of sharp masks in portraiture will result in undesirable effects and the portrait man is forced to use a *soft* mask.

Here again the technique is straightforward and will be readily explained by Figure 8. Here the contact printing frame has been placed on the turntable of a record player placed under the enlarger light and the exposure is made with the turntable in motion. Note that there is about a three to one ratio between the vertical and horizontal distances from the turntable to the enlarger lens. Exposures should be such as to permit the printing frame to make at least several trips around. In making such soft masks the original negative should be turned over so that the image thereon will be separated from the new image by the thickness of the original film. The varying angle at which the light strikes the film will result in the mask edges being softened the requisite amount.

If you're in a hurry and want to save time in preparing masks, line film, such as Photolith, can be used in place of the continuous-tone negative material recommended for the highlight and shadow masks. The time saving features of line film are its fixing, washing, and drying times. It is necessary to wash such film only about ten

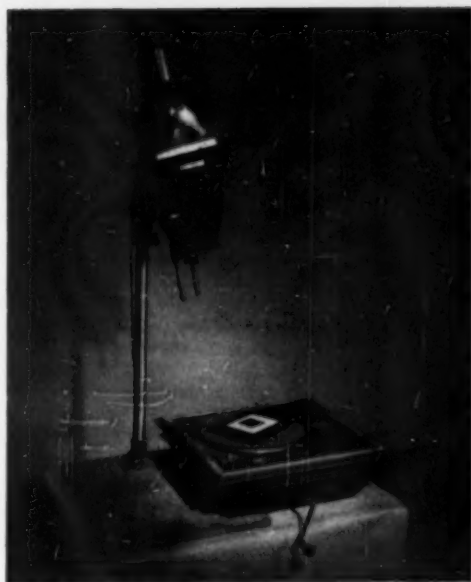


FIG. 8. The set-up used for producing the soft-edged masks mentioned in the text. The turntable shown is the top of an old phonograph discovered in an attic and purchased for \$5.00. A modern version will do just as well, and it makes no difference whether it's 33 $\frac{1}{3}$, 45, or 78 r.p.m.

minutes and it can be dried by a hot-air hair drier in a matter of only a few minutes. When used in this manner (as a substitute for continuous-tone material) it should be developed in a soft developer rather than in the line developer usually associated with the line film. The soft developer can be your regular film developer diluted several times with water. While line film so used will do a fair job on half-tones it is not as good as regular continuous-tone film.

Until you're familiar with masking it will probably pay you to make several masks at a time, each with a different density. Then if you find the mask to be too heavy or light, you can try one of the others.

There are, of course, other ways of making soft masks, such as the use of diffusing paper between negative and mask, etc., but space does not allow me to go into detail.

It has probably occurred to some by this time that the use of New Coccine on the original negative can do exactly what we have been striving to do with masks. That is true except that in applying New Coccine there is great danger of altering light values to the point where something doesn't ring true in the final print. In using photographic masks you are simply selectively emphasizing the existing light in a manner which is proportional to its actual distribution. This effect is difficult to achieve with New Coccine. With a photographic mask it's automatic.



CONEY ISLAND

John Sidney

Camera Club Objectives

WALTER SARFF

CAMERA CLUBS, like people, have their different personalities. Also, like people, they have to be organized, given a goal, if they hope to get anywhere. Furthermore, there must be a direct relationship between the goal and member interest. Otherwise, there arises the old problem, but on a larger scale, of the round plug in the square hole.

Regardless how free, uninhibited, or hobby-conscious a camera club wants to be, it should have a real, tangible, basic objective, or plan for being. Photography works for a while. So does sociability. So does competition. But they wane. The members drift. Ultimately, they drift out the door and out the club—and there goes your camera club!

Every camera club should have something to do, and keep its members busy doing it. The management of the club should take inventory of the membership assets—material, spiritual, esthetic—with emphasis on member talents and interest in photography. From this inventory a basic and realistic program—an objective—can be outlined for the future direction of the organization. This

How to Produce More Activity AND Better Photographs, Both!

program can be developed on a year to year basis within the ever-changing values of membership. Or it might be a two-year program. Or even a "Five Year Plan."

The important thing is to *have* a plan, program, or objective. It gives direction to the club. It gives it momentum. Members get more out of the club, and out of photography. They're working toward a goal, or goals, instead of drifting with the photographic tides.

For instance, a planned project is a good objective for any camera club. A project can absorb all the energies of the club, or only part. It can be the sole end toward which the club is working, or it can be a club operation in which every member participates now and then. The inventory should reveal, or at least suggest, the nature of the project. The big idea is that once the project, or

objective, is planned, promoted, and publicized, members will be interested and active, new members will appear, and the club will grow, photographically and otherwise. People, and especially amateur photographers, are like that. They react actively to ideas, to suggestions, to inspirations, to objectives.

Planning a Project

Let's say, right here and now, that just having any old project, with any old kind of planning and guidance, probably won't work. Planning is no pushover. It requires cerebration. Which means looking ahead and, even more important, planning ahead. And fitting the program to the personality of the club and the interests of its members. It is obvious that the members of an Alaskan camera club would be something less than thrilled with the idea of photographing the Great Sloth, which makes its home in warm countries. Tropical camera clubs will be equally disinterested in photographing igloos and their people.

The inventory must be, above all else, realistic. Its purpose is to get club members to perform, not reform. All of us do best what we like best. Consequently, we have to develop a program, project, or objective which, fundamentally, will be interesting to club members and will give them opportunities to exercise and indulge their various interests and talents. You'll get the idea very quickly if you try to convert a confirmed bridge player to canasta, or vice versa. Perhaps it can be done, but life is rather short.

Well, what *will* work? To my mind, a very good project idea is to make a photographic study of the nationalities, people, buildings, streets, or any other phase of the home community. Yes, the idea has been suggested before. Yes, some clubs have tried the scheme, and failed, dismally. But let's go down into the boiler room and see how a project is *made* to work. There's nothing inherently wrong with the project. It points the camera at life, as any of a number of schools of photographic thought advise. It provides full scope for the interests and activities of every kind of photographer. It does require planning, and direction, and promotion.

Policies and Practices

Let's call this project "Our Town, Its People," and make it a part-time activity of the club. This should be a long-range project. Always the planners of the project should keep in mind the indefinites and the intangibles and the changes, and a number of unclassified ramifications which always are possible.

First, all club members—and that means *every* member regardless of equipment, ability or previous state of ineptitude—should be told that he or she has an important contribution to make, that such contributions are needed, and that the project won't work unless all such contributions are made. Next, the planners should avoid hanging any presumptuous tag on the project. It should be called neither documentary, nor pictorial, nor modern, nor futuristic. It should be described as sufficiently broad

to include *all* these schools of photographic art or thought, and any new schools or isms which are likely to develop en route. It should be made painfully apparent that the only real good is *good* photography. And every member should be convinced that so far as freedom of expression—meaning freedom of artistic expression—is concerned, the sky is the limit. Everyone works in his own medium and in his own way without let or hindrance.

Furthermore, the project should be embellished with the minimum of rules, regulations, and restrictions. Again, the goal is good photography, and how anybody gets there is his own business! However, there should be plenty of opportunities for all members to make suggestions—and every suggestion should be considered in developing and planning the project.

Laying the Foundation

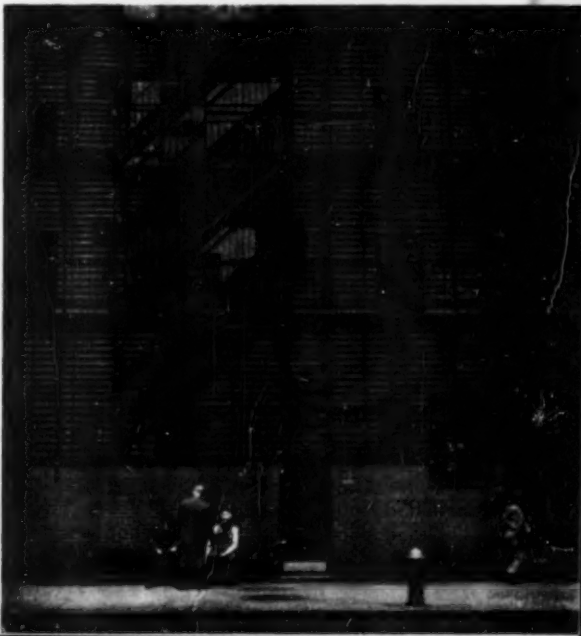
Start off by having an open meeting. "Open" means that every member, regardless how ridiculous his suggestions, has an equal chance to air them. Present every known phase and facet of the proposed project. Have the secretary jot down in black and white every idea suggested at the meeting.

Permit no misunderstandings to develop. If there are questions, see that they are answered. If there are complications, get them unscrambled, promptly. Leave no stone unturned in seeing to it that everyone has his say—and says it.

Make certain the secretary jots down the names of those most enthusiastic and interested. This is a democratic meeting but realistic. Those interested, enthusiastic people are just the folks to become members of the project committee. Make certain that the dissenters get the poison out of their systems. Be sure that everybody understands.

STAGE DOOR

Muni Lieblein





AT THE VILLAGE ART SHOW

E. A. Werber

Take every step to assure complete knowledge and understanding of every phase of the project.

All these points are important because once the project is under way, momentum and energy cannot be wasted on dissenters, the non-cooperative, the folks who didn't understand. Furthermore, once the project is under way, there must be *firm guidance*. The project cannot be permitted to lag and to sag while some non-cooperative group gets in its dirty work. Once the project is started, time and energy is needed for the project itself. *Doing* will be the watchword.

Work for a Committee

A successful project demands the guidance and leadership and direction of a Project Committee. A real leader is essential as chairman. The members must be enthusiastic for the project. Every member must be assigned definite, specific jobs, which they will perform—or else.

There's the matter of *correspondence*. The member in charge must have talent and facilities for correspondence. There is the matter of establishing *criteria*, or standards of photographic excellence. This is no job for a snapshooter, nor for an amateur steeped in some particular photographic ism. Needed for this job is a club member who is broadminded, democratic, possessed of an art background, and who knows good photography when he sees it. He must have a catholic taste, because he will be called upon to judge many kinds of photographs. He must have the courage of his convictions, because he will be called upon also to make firm—and sometimes unpopular—decisions.

There's the matter of *exhibitions*. Photographs made during the course of the project should be exhibited, frequently. The member in charge should be one who can find places for exhibitions, find people who are interested in having exhibitions, arrange and plan exhibitions. Then there is the matter of *indoctrination*, an important phase of the work. It must be handled by a member who has the ability to make himself understood. His job it will be to teach present and prospective project workers the real meaning of the project, and to keep them on the beam when they tend to wander.

Next comes the matter of *outings*, an interesting and active part of project work. The person in charge should know how to plan outings so that they will be enjoyable to all, yet will contribute to the project. Then comes the club member in charge of *portfolio*. He must be a person fond of detail. His job it is to attend to details—assembling and keeping the prints; classifying, cataloging, and filing; attending to releases, copyrights, and legal questions, if any.

There's a big job, as the project continues, for a club member with a knowledge of *publications*. Project pictures can become important, sooner or later, and it is wise to have somebody on hand who knows his way around the publishing business. Out of such a project might come a printed book, or a folder, or a portfolio and income for the club! Another important job is that of the member in charge of *public relations*. Always there should be happy and close relationships with the outside world. There are contacts to make, objectives to explain, opposition to subdue, cooperation to gain.

Records of various kinds will be required, and a record-keeper will be a busy member of the committee. There is *research* to be done, and this is a job which may require the work and attention of several members. Good researchers are most important to the project because they

MACY PARADE

Rosalia Sarif



can develop new and interesting phases, keep interest boiling, develop new ideas and sources. One member should be working on *social* aspects of the problem, probably in cooperation with the outings chairman. There are the highly important matters of *financing* and of funds, which should be the responsibility of some financial genius among the members.

This is, probably, an incomplete list of the various committees and chairmen thereof related to the overall project. Quite obviously there is, first of all, a large problem in organization. Some clubs may want additional committees and officers for their projects; others can get along with a simplified structure. Major point is to provide activity for all, to avoid overburdening any, and to keep the project fun instead of letting it become work. There are times when the project directors are likely to become swamped. Then comes the possibility of cooperation between the various groups and committees, with members conditioned to giving each other the necessary lift.

Always Contingencies

Always and everywhere a camera club project of this kind will create, even generate, contingencies. Here are some basic points which should reduce difficulties to the minimum:

The project program alone is insufficient. Supplement it with a program of education and orientation which will arouse, enlist, and maintain interest.

Establish the confidence of the camera club membership in the project as something of which the club can be proud.

Put the emphasis upon *doing* rather than *planning*. Make sure all members, and everyone else interested, gets opportunities to see the work that is being done. Here is a chance to interest and to enlist new members!

Constantly invite new and additional suggestions for the project committee.

Stress the fact that the organization is not being changed into a project club, but is an active camera club *with* a constructive project.

Try to correlate the project and the various outings, social gatherings, and meetings of the club.

Impress upon members the fact that while the project is not

DEPARTMENT OF SANITATION

Harold Arrigoni





NEW YORK BRIDGE

Harold Arrigoni

intended to be a schooling for beginners, everyone can learn more about photography by participating. Here is a chance for cooperation between the project and the club's courses in photography.

Put the project prints in a permanent collection, but overlook no opportunity to exhibit them.

Make it known that every type of photography may be employed—stills and movies, color and black-and-white, pictorial and documentary, salon and futuristic.

Plan—and announce—working schedules sufficiently in advance so that workers can plan ahead.

Enlist the interest of Chambers of Commerce and other civic bodies and organizations in the project.

Helpful Experience

These suggestions are based upon experience. The Manhattan Camera Club, of New York, now is engaged upon just such a project, "New York — Its People." Naturally, there are plenty of people in New York. Too many for one camera club ever to hope to photograph. But, with organization and a two-year program, Manhattan is proceeding with a representative job.

The project has been divided, on a time basis, into quarters. There is a definite schedule for each quarter of the two years. There are two directors for each calendar quarter. Each director knows what is to be achieved in his quarter. Each director has the help of chairmen and committees in charge of the various phases of the project—correspondence, criteria, exhibitions, funds, indoctrination, outings, portfolio, publications, publicity, public relations, records, and social.

The average camera club member might think that

such a program, so fully developed and planned, and working according to schedule, would impose restrictions upon the camera-worker, handicap his style, absorb his time and interest, prevent him from enjoying photography in other fields. There may be those who think such projects are pretty stupid, providing little or no opportunity for inspiration, self-expression, or photographic art.

As a matter of actual fact, the Manhattan Camera Club Project comprehends just about every subject in Greater New York which has proved for years to be of interest to members of the club. The chief difference is that, under the project, the members are making pictures for a purpose—the project. They may use their pictures for other purposes, too; there's no restriction. Point is that they are interested, inspired, and even spurred by competition to do their best—and better than their best.

The idea better is gained from a brief look at the project program for some quarters. Except for the emphasis upon people—and the presence of people in photographs is no particular handicap—it will be found that the program comprehends, very completely, the subjects and activities which would be, instinctively, of interest to all photographers.

No club or its members should be frightened by the idea of organizing and conducting a project. No member should fear regimentation. The project invites and encourages self-expression by photographic means. The chief difference is that it provides a definite program, substitutes order for chaos, replaces drifting with direction.

Take a look at Manhattan's project schedule for the last quarter of 1950. The program takes up recreation, play, and the social phases of life in New York and its people. Here are the subjects:

Bridle paths, bowling alleys, park chess boards, tennis courts, YMCA, swimming pools, roller skating rinks, museums, baseball stadiums, side street games, community centers, zoos, Madison Square Garden, circuses, political rallies, sitting and play parks, botanical gardens, boating areas, Hayden Planetarium.

Look at the program for the fourth quarter of 1951. Architecture is the basic subject. Here are suggested phases: Historic houses, Grant's Tomb, Statue of Liberty, Radio City, United Nations, Empire State Building, Buildings under Construction, Wall Street, Advertising on Tall Buildings, Window Displays, Broadway's Gay White Way, Churches.

And here's the program for the third quarter of 1952. It covers Greenwich Village, gardens, nationalities, folk dances, and folk cultures. It takes Manhattan's members into Greenwich Village, Washington Square, Yorkville (German), Little Italy (Italian), Chinatown (Chinese), Harlem (Negro and Spanish), and into gardens, halls, exhibits, and folk parties in various parts of the city.

Camera club objectives and projects? They're nothing difficult and fearful. They are merely enlarged, purposeful, directed camera club programs of activity which give camera clubs a constructive goal—and plenty for the members to do—and an opportunity for all members to become better photographers.

[Ed. note: See also Camera Clubs Column, Oct. issue of JOURNAL.]



DAFFODILS AND DIAGONALS. Corrugated cardboard combines with graceful blossoms to produce a decorative effect.

How to Make

PLANT PORTRAITS

LOUISE BROMAN JANSON, APSA

IN THE portraiture of people the photographer is constantly emphasizing mood and character. A forceful, aggressive person is treated in a different vein from a gayly effervescent child, just as an aged woman is portrayed in a separate light from the modern miss.

The fascinating field of plant photography makes use of many of the principles involved in everyday portraiture. There are as many interesting variations in types of plants

as there are in people. Some are frail and dainty, others strong and sturdy. Some are created for grace and beauty, others for usefulness and service. Some are tall, others short. Some have amazing powers of self-preservation under adverse conditions, others perish without a struggle.

The best pictures of plants and people depict the true nature of the subject. In photographing a child with blond hair the lighting is arranged to simulate sunshine

playing on fair hair. When working with the delicate petals of a light colored flower, every effort is made to retain detail and produce a translucent effect. Tall plants are photographed to convey the impression of height just as dwarf specimens are shown to hung the earth.

There are a number of different interests in plant photography which lead to various approaches. Those of the botanist, horticulturist, pictorialist, and nature photographer are specialized interests and require specific interpretations. The botanist likes to see as much of the plant as possible growing in its natural surroundings. The horticulturist asks for photographs showing garden borders and beds as well as individual plant studies showing size and accurate color of flowers and fruit. The pictorialist strives for a striking and decorative rendition. The nature photographer tries to combine beauty with scientific truth.

Regardless of which approach is followed, working with plants becomes an excellent avenue of relaxation. The speed and rush required by so many branches of photography is of little value. Careful and deliberate planning together with infinite patience, produce the best results. No collection can be completed in one brief year and there is always the pleasant anticipation of another spring.

The search for subject matter does not require extensive travel. The trees that line the city streets, the flowers that grow in the gardens, the blossoms that brighten the empty lots, the plants that comprise the city parks, and the flora of the prairies, mountains, and deserts provide ample material upon which to train the lens.

Few portraits of people show the full figure because the photographer feels that the face is more important. By the same token, to the pictorialist and nature photog-

rapher close-ups of flowers, buds, or berries depict shape, form, color, size, and texture with far greater success.

Thus, for plant portraits a camera equipped with ground glass focusing and double extension bellows is necessary. For monochrome prints, film sizes smaller than $2\frac{1}{4} \times 3\frac{1}{4}$ are not apt to produce the results that are obtainable with larger sizes when striving for photographs of exhibition quality. A sturdy tripod, lens shade, reflector, and artificial backgrounds are needed accessories. For indoor work one #2 floodlight, one #1, and a 500-watt spotlight complete the bill.

A careful selection of subject matter should be made keeping in mind that the specimen should be free from flaws and as representative of the plant as is possible to locate.

In outdoor work the position of the camera is best determined by observing the position of the sun in the sky. Remembering that side and back lighting emphasize texture, the camera should be placed at a point that will attain this result. The overhead light of the noon-day sun is not as satisfactory as a lower angle of main-light. This is achieved by working during the morning and afternoon.

An unobtrusive background is needed to center attention on the subject. Spotty and blotched backgrounds are disturbing to the eye and detract from the picture.

Many fragile wild and garden flowers are best portrayed outdoors because they wither soon after cutting and do not withstand the heat of artificial lights. However, there are sturdy plants which lend themselves admirably to indoor conditions and simplify the difficulty of waiting for the wind to cease.

A few successful pictures are all that are needed to gain a lasting interest in the portraiture of plant life.

WILD BLACKBERRY. Showing buds with full blossoms adds interest. Taken outdoors, 1/25 sec., f/32, Super XX.

LUPINE. Sufficient depth of field is obtained by arranging the straight spikes in the same plane. Taken outdoors.

IRIS. A flower garden provides many beautiful subjects. Taken outdoors, 1/10 sec., f/32, Super XX.





Gottschalk, Kleiner

The stately giant breeder tulip, Kathryn Truxton, contrasts vividly with the purple-blue of groundcover *Ajuga reptans*.



Gottschalk, Kleiner

Daffodils are ideal for naturalistic plantings. The dependable Daisy Schaeffer nestles comfortably under a birch.



J. J. Stephens

Distinctiveness in the garden can be obtained by using less common bulbs like this *Tulipa kaufmanniana* hybrid, Gaiety.

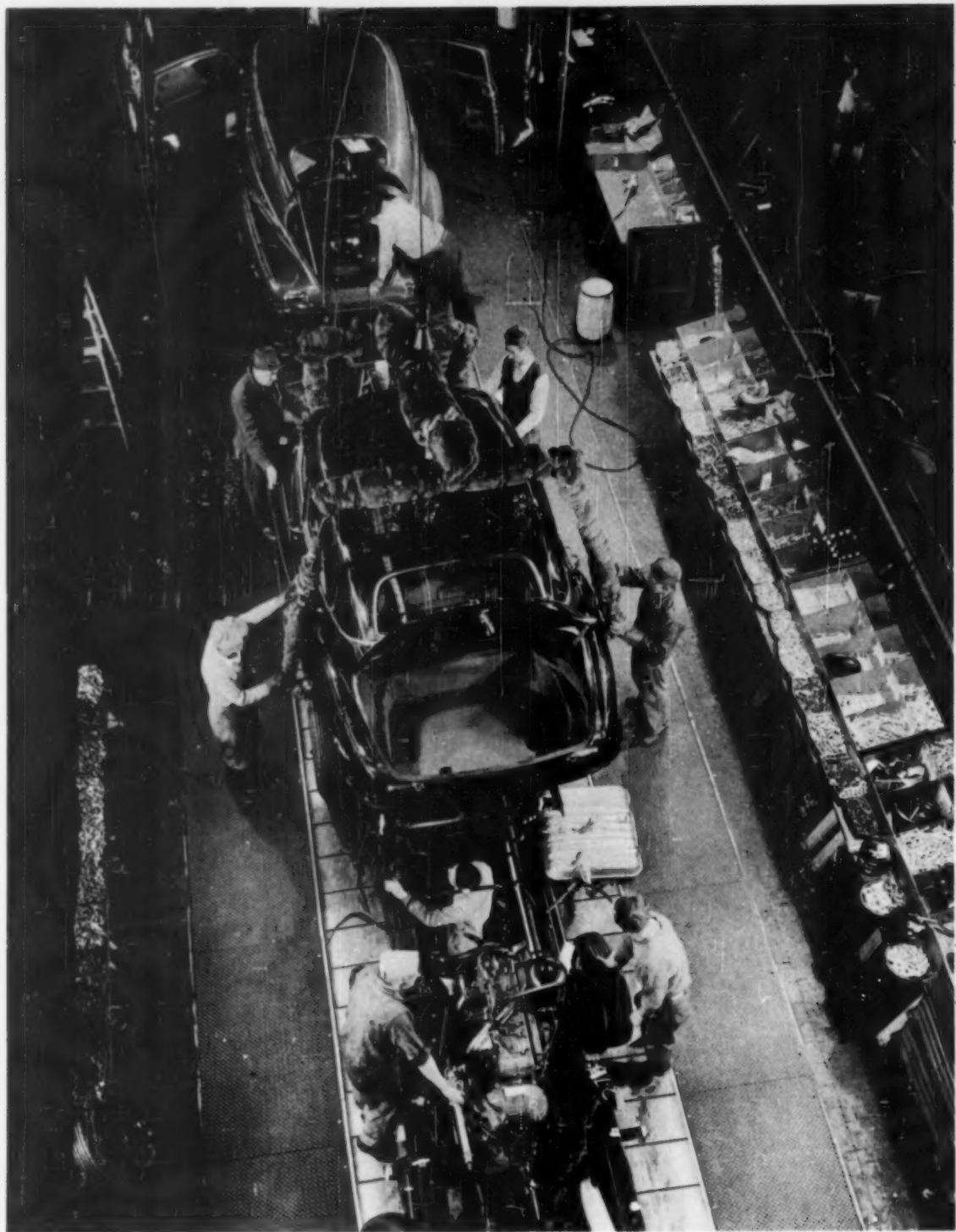


F. W. Casebeer

Daffodils, tulips, hyacinths and forsythia sprays from your own garden can be used to make cheerful arrangements.







Courtesy General Motors

ROBERT YARNALL RICHIE

PHOTOGRAPHY for INDUSTRY

MILLER SIMON

MANY an editor has been dismayed by the quality of the photographs received from industrial public relations offices for illustration of an important editorial story. Frequently, if time and budget allow, he will find it necessary to send a photographer of his own selection to cover the subject properly. This happens even in the cases of many large corporations which may have public relations departments, but seemingly remain unaware of the value of *good* industrial photography.

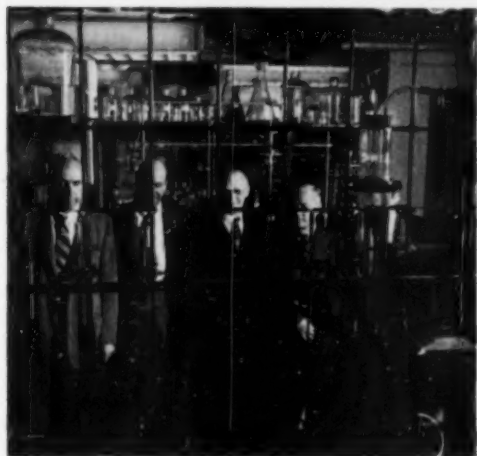
This situation was one of the factors motivating the formation of "Photography for Industry," a group of magazine photographers who have had long experience in the industrial field. The happy combination of editorial and industrial ability enables them to create photographs for business concerns which not only satisfy the needs for advertising, public relations, brochures, annual

reports, sales presentations, exhibits and other graphic media but also will frequently attract editorial attention in national magazines.

The ability of a good magazine photographer to introduce drama and story-telling into his work is a distinct asset to industrial photography and a quality frequently overlooked. Company public relations men are often in the habit of commissioning picture jobs piecemeal; buying from the most convenient photographer and not the one best suited to his purpose. The results leave much to be desired even in cases when highly paid "specialists" are called in on the job. While the results may be highly artistic and would do the photographer proud in an exhibition, their insincere quality and lack of true relation to the subject reduce their value and use.

Good industrial photographers work closely with the

National Dairy Products Corporation recently dedicated a new research laboratory at Oakdale, Long Island, and commissioned PFI to cover the two-day ceremonies. Below are pictured members of the board of directors of the company on a tour of the laboratory. Such unposed pictures require fast work. RIGHT—The Dayton Rubber Company's foam rubber manufacturing process is a secret one. This fact was used to advantage in this shot of the factory laboratory. A tricky technical problem on this job was the concealment of certain phases of the process while attempting to give the complete story of the making of foam rubber. Photos by Arnold Eagle.





Low altitude aerial work frequently can do a visual job which cannot be equalled from the ground. Large plants, planning projects, housing are some of the subjects to which it is especially adapted. This Standard Oil Co. (N. J.) photo shows the United States Lines piers at the foot of West 23rd St. in Manhattan. The large two-funnel steamer on the left is the liner "America".

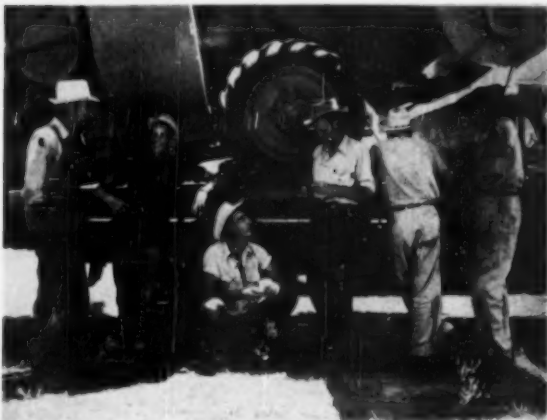
As part of a story on wheat for Standard Oil Co. (N. J.) PFI Photographer Russell Lee made the picture on the right of an itinerant combine crew at Frederick, Oklahoma.

Extrusion die shop at the Phoenix, Arizona, Reynolds Metals plant. PFI assignments take the photographers to all parts of the country and to all types of industry. Charles Rotkin photo.



client. Before any shooting is done they must have a clear understanding of the uses to which the photographs will be put. Sufficient research for a general familiarization with the subject is essential. This can be accomplished by a conducted tour of the operation, special reading, or both. More important is an enthusiastic curiosity and fresh viewpoint, which can discern and portray the drama and excitement in a subject which to the expert is commonplace. The industrial photographer requires a thorough knowledge of all modern photographic materials and techniques, but, as in good writing, a strong resistance to the use of the cliché.

Photography for Industry is a partnership of several photographers and a full-time manager, who is in charge of sales, service and consultation. The headquarters of the organization is in New York, but its operations are nationwide through contacts with other strategically located magazine photographers. PFI offers a service to small and large businesses that is unique in the photo-



graphic field. Many organizations not only have need for first class industrial photography but also require advice on how to make best use of the pictures once they are produced. PFI follows through, when the client requests it, with the assembly of picture stories, exhibits, and the placing of them in the media where they will be most effective for the client's purposes. Editorial placements are expedited through personal contacts on the staffs of several magazines and the editors' familiarity with the work of the photographers.

In many cases, the picture files of new clients are an unclassified maze of good and bad pictures, almost useless for ready reference. PFI frequently assists in the organization of picture files, and, with their own work as a basis, establishes a system whereby pictures are readily available.

Clients' negatives are usually kept in a numbered filing system at the laboratory. All prints are numbered and

on most jobs a book of contact prints is given to the client. Reordering of prints is thus facilitated. Public relations men find it much easier to contact a permanent office than to track down a roving free-lancer when prints are needed in a hurry.

To the industrialist and his advertising and public relations staff this means an effective photographic service at minimum cost and effort and with maximum efficiency. There is no need for the maintenance of a physical plant under his own roof or even a negative file. It gives clients the opportunity to obtain the varied talents of several photographers on different phases of his operation, or, in the case of a big job requiring early completion, the simultaneous use of two or more men without need to make separate arrangements for them.

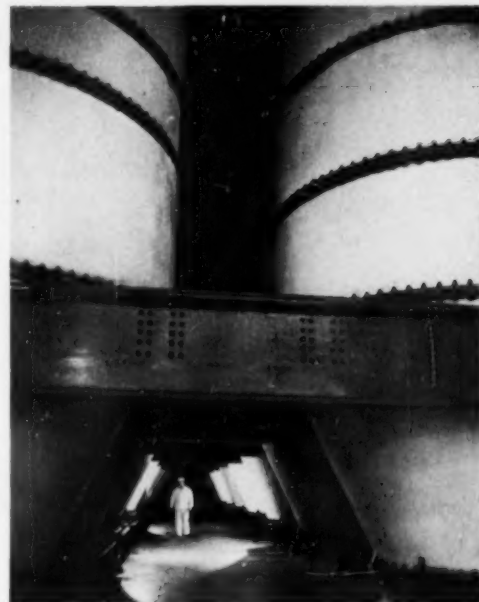
The basic job of the industrial photographer is to interpret the dramatic aspects of the subject he is working on, put it on film in such a way that it can be used effectively and yet retain the continuity of the story. Each



Extrusion press at the Phoenix, Arizona, plant of the Reynolds Metals Company. The tube will be cut lengthwise, flattened out and become part of an airframe. Photo by Charles E. Rotkin.

Mr. C. W. Popnoe (left) produces cotton on his farm near Snyder, in the heart of the rich Scurry County, West Texas, oil pool area, while Cities Service produces oil from the pool under it. Here Mr. Popnoe loads a hopper on his cotton seed planter. Photo by Russell Lee.

For the Sugar Research Foundation, Inc., Arnold Eagle made a series of photographs showing the steps in the production of cane sugar. This is one from the series showing huge granular bone-char tanks.



job is a challenge and there is no set of rules to follow, no substitutes for the creative quality of the individual photographer or his long experience in the field. He must be able to deal with a multitude of technical problems apparent in this work and should be able to set up his equipment with a minimum of inconvenience to those working around him. But he must be honest enough to demand necessary changes of his subjects, such as cleaning or painting of plants and equipment.

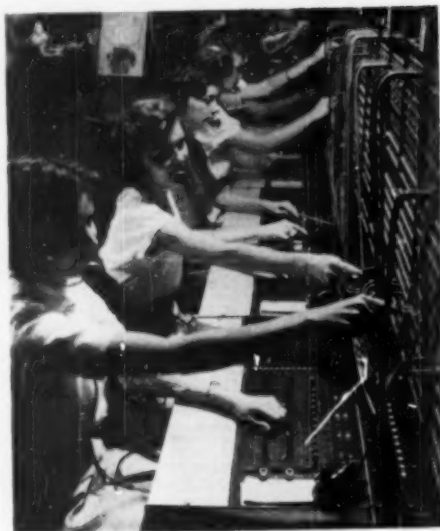
Photography has always required ingenuity, but industrial photographers are constantly faced with problems requiring inventive genius to a greater extent than their colleagues in the studios.

The concept of PFI service was attained after consultation with several experts in the visual field. They included Roy E. Stryker, Director of the Photographic Library of the University of Pittsburgh, John Whiting, APSA, magazine publisher and author of "Photography

Is a Language," Carl Maas, consultant to the photographic department of the Standard Oil Company, (N. J.), and Jacquelyn Judge, formerly picture editor of *Business Week* and now editor of *Modern Photography*. The end result is a growing organization which is giving a wide variety of business firms a unique photographic service. Its clients, which include some of the blue ribbon firms of America, have found a new usefulness for pictures because the photographs they are buying are made with an understanding of the job to be done.



These pictures, made for the American Telephone & Telegraph Company, are part of an extended project for that company. Arnold Eagle spent an entire month in the city of Auburn, New York, which the company selected as a fairly typical small city. There he worked closely with Telephone Company personnel in photographing the entire telephone operation, as well as a great deal of material on the relationship of the telephone to the business and social life of the community. The client is already organizing an exhibit which may be used for employee as well as public relations. The pictures are intended for a host of other uses including advertising, booklets, public relations releases and as a nucleus for a public relations file, which is abuilding.



Business is people as well as machines and paperwork. This is one of a series Eagle made of the weekend of a telephone installer-repairman.

LEFT—Operators at long distance board. Not a posed picture and one which any photographer will recognize as a poser.

Below a switchman adjusts relays at a telephone dial central office. With few wheels that turn, the telephone operations offered a challenge to photographer Eagle. Dramatic pictorialization was achieved by advantageous use of patterns where they were available.

Below are the machines which make your telephone ring. The one being cleaned operates with commercial power, the other is used in the case of power failure, works from battery power.



How To Photograph Pets and Animals

JOHN H. VONDELL, FPSA

I HAVE always believed that the best way to become versatile-minded in photography is to belong to a camera club that has print competitions on assigned subjects each month, and to enter a print each time, if possible. The varied experience thus gained is invaluable in establishing a broad technical and artistic background.

However, despite this enforced versatility, each member normally will gravitate eventually to a specialism to which he is best suited by temperament and taste—and in that field he is most likely to excel. Some prefer landscapes, and do their best work in that branch of the art; others become skilled marine specialists, and yet others choose the several remaining subject matter categories for their most serious efforts.

A few make exceptionally fine pictures of pets and animals. This branch of photography has many exacting requirements. It calls for a liking for all sorts of animal life and the ability to see real personalities in the subjects. It demands patience, coupled with the ability to expose rapidly when the opportune moment arrives. And, as has been said, someone to help you—for it is impossible to keep one hand on the camera and two hands on the subject, when photographing small animals, chicks, ducklings, etc.

Pets lend themselves well to human-interest treatment. They can be adapted to either contests or exhibitions, and are equally popular for magazine cover use. A poll of the favorite covers on some of the national magazines, like *Woman's Day*, shows that pictures of cats and dogs are at the head of the list. The sad-faced antics of the cocker spaniels on the covers of the *Saturday Evening Post* have endeared them to thousands. There is an irresistible appeal in such pictures.

Whereas the landscape photographer searches for a scene that has the proper composition and mood, the animal photographer conceives a picture, and then goes about arranging and taking it. More than half of the making of an animal picture is in the planning. The best pictures tell a story. A keen insight into the habits, peculiar reactions, and emotions of different animals is necessary in the creation of good studies of this nature.

Two types of cameras seem best for pet photography. The press camera, with synchronized flash, is my favorite for all-round use. For most pictures, any of the reflex cameras are equally good for outdoor use, but are not effective for close-ups. Shutter speeds up to 1/200th constitute a minimum requirement, and up to 1/400th are advantageous at times. My preference in film is a fast emulsion, such as Super Panchro-Press, Type B.

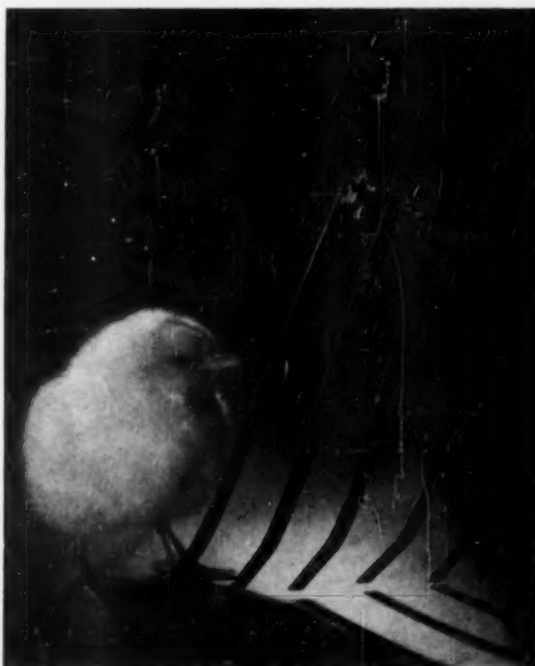
For close-up work, it is necessary to stop down as much as possible to gain depth of field, and for this, as well as for action shots, fast film is needed.

Within the practicable limits of this article only a few of the possibilities can be pictured—yet an effort has been made to show a variety of presentations. Cows, horses and sheep can introduce a pleasing pastoral element into a landscape. Pictures of this type are easy to take, but often require much time and patience to obtain a good grouping of the animals. In flat fields, an excellent plan is to make use of a portable stepladder, or even stand on your car, if possible, in order to increase the depth of the picture base. I know of a number of landscape photographers who always carry a folding ladder for this purpose, and in addition, they would not be without pruning shears, axe and other tools, for the improvement of unkempt landscapes.

Cows have a habit of trying to sniff and lick the lens on your camera, and horses will do the same thing. Many hours can be spent in endeavoring to outmaneuver

SPRING DESIGN

J. H. Vondell, FPSA





THE ORIGINAL "S" CURVE

J. H. Vondell, FPSA

these larger animals. I spent an entire afternoon last summer getting a few pictures of two colts with their mothers. The lineup and action of the foursome were

PLAYMATES—MAYBE

J. H. Vondell, FPSA



constantly changing. The picture possibilities of horses and colts are limited only by one's patience, nor do I think that the subject has been the least overdone.

What has been said of horses applies equally well to cows, except that the latter do not have the gracefulness. Nor should goats be overlooked as pictorial material. Back-lighted billy goats have long been featured as popular subjects. Most of them are quite active, hence a reflex camera is particularly useful. Since they are not very tall, and we want to picture their heads against the sky, it is necessary to take them from a knee-level position. This, too, more properly calls for a reflex camera than for other types of equipment.

Dogs are specialized subjects that have been portrayed in a superlative manner by such artists as Franklin I. Jordan, Jack Wright and Arthur S. Mawhinney. However, many of the dog studies that have been submitted to salons have failed for the same reason as have many children's pictures; that is, the subject has strong family significance, but the picture is merely a good likeness, and lacks general appeal.

Cats and kittens come somewhat in the same pictorial classification as dogs, but for the most part they are not such intimate pets, and live a bit closer to the wild state. However, cats can be used very effectively in storytelling pictures. One of my best shots was the old, familiar cat-catches-rat theme. The first time I took it, I used a wild rat that had been caught in a trap. I tunneled through an old bag of grain and inserted a piece of stovepipe. Then the rat, that had been wired to a stick, was shoved through the tunnel until his head just emerged. Finally, a tiger kitten was placed on the grain bag directly above the protruding rat, and the negative exposed at 1/200th with flash. I have subsequently had access to tame, black rats and, on several occasions, have borrowed specimens which I have posed with kittens quite successfully.

The smaller members of the farm have always intrigued me as picture material. I refer to turkeys, ducks, geese and chickens. Unless they are taken in flocks it is necessary to pose them and use a press type camera. Ducks rank at the top in intelligence, with turkeys very definitely at the bottom. Whereas one can walk out into a pasture and simply take pictures of horses, cows or sheep in their natural habitat, it is necessary to plan set-ups for these members of the feathered world.

Turkeys are large enough to be taken by themselves. And, in the neck of a turkey we have the original "S" curve. It will be recalled that they have long been pictured in Thanksgiving themes. The bronze turkey is the most common variety, though whites photograph well and are second in numbers. I think that one of my best pictures of turkeys is a large Kodachrome of three white specimens strutting on a green lawn beneath a brilliantly colored maple tree. The turkeys did not happen to be there; we had to transport them and wait quite a while for them to become adjusted to the place. Male turkeys ruff out their feathers, or strut, and this is when they photograph best. They move somewhat slowly, and a shutter speed of 1/100th will usually stop the action.

There is something about an old hen and a brood of chicks that interests everyone. Last spring the advertisement of a leading film manufacturer featured a mother hen and a group of chicks nestled around her. Such pictures must necessarily be posed. The nest was built in a studio set-up; the camera was focused; then the hen was brought into the partially darkened room, placed on the nest and the chicks placed around her. As soon as she felt the chicks, she settled down, and the photographer could arrange the chicks before flashing the picture. Sounds easy, doesn't it? And sometimes it works out as easily as that. At other times, however, we get a hen that just refuses to respond. Using a partially darkened room, moving very slowly, and talking a little helps to calm the birds.

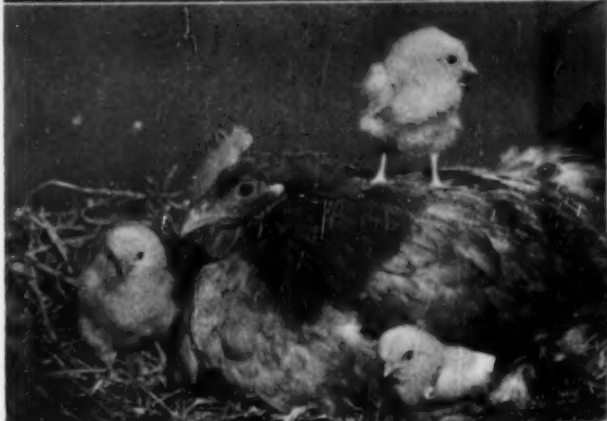
From what has been said, one can see that flood lights are not used for this type of work. First, the birds are either flighty or frightened. Secondly, the heat of the lamps will put baby chicks and ducklings to sleep; and thirdly, the light output is too low for the speed and depth of field that are required.

Both chicks and ducklings are so small that for the best pictorial treatment they must be photographed with something else. The best exhibition picture that I have taken is the one entitled "Progeny," where the leg of an older bird is used to symbolize another generation. The two chicks around the feet of the parent are the center of interest, but the leg improves the composition, helps fill the picture area, stimulates the imagination and adds to the story-telling effect of the study.

When photographing chicks and ducklings, it is better not to depend on one or two specimens only. If you plan to use one or two in your picture, I suggest that you have eight or ten with which to work. Some will perform properly and some will not. If one "model" doesn't respond, I put it back in the box and try another.

Baby ducklings, in my opinion, are the prime subjects for studies of this type. They have every quality—pictorially speaking. But the rule of having plenty of models holds, because some will quack while others won't; some won't stand up straight; some scoot away from you, and so it goes. It is natural to associate ducks with water and wet weather. Therefore, I have photographed them with umbrellas, drain pipes, in a small pool, under a garden hose, etc., and I am still searching for ideas.

Which brings me to the conclusion: *Ideas* are 80 per cent of the picture. It is the thing that you cannot buy at the camera store. Some ideas come easily, while others are the result of great effort. To illustrate the point: I had a few handsome, white chicks on hand at one time. They were excellent models, but what could I do with them? I didn't have an idea. Finally, in looking through the Sunday papers I noticed the advertisement of a lawn rake for general spring use. "That's it," I said, and brought in our rake and made a set-up down cellar. The rake and a back-lighted chick photographed into "Spring Design"—a rake, a chick and an idea.



Top: Colts in a pasture are wonderful subjects. Center: Life with mother. Bottom: Three porkers can give your camera a busy time.





The Work and Ideas

of

ANSEL ADAMS, FPSA

JACK WRIGHT, FPSA

WHEN Ansel Adams was fourteen years old his father offered him the choice of a vest pocket Kodak or a pair of two-wheeled racing skates. "I shudder to think what would have happened to me if I had chosen the skates," Adams said. However, Mr. Adams selected the camera, and thus was begun a notable and significant photographic career.

Ansel Adams was born in 1902 in San Francisco. His father had likewise been born in San Francisco, so that between them they saw the city grow from a brawling, pioneer settlement to the great metropolis which it is today. In education Mr. Adams' training was varied and informal. He revealed his artistic bent at an early age, and it was decided that he should become a concert pianist. Along with his study of the piano went a delving into literature, esthetics, etc. Incidentally, the discipline and rigorous study required in preparation for the concert stage stood him in good stead later, when he decided to take up the practice of photography.

Another thing which left its mark upon him as a boy was four summers spent in the Sierra Nevada Mountains. With knapsack and packtrain he covered these rugged regions from end to end, climbing their highest peaks and exploring their remotest areas. Everywhere he went he took his faithful vest pocket Kodak.

In 1926, at the home of Cedric Wright in Berkeley, California, Mr. Adams met the late Albert Bender, great patron of the arts and philanthropist. Bender and Wright became close friends of the youthful Adams and by their sympathy and understanding had an important influence upon his development. Bender saw some of

"Gates of the Valley, Winter" from "My Camera in Yosemite Valley" is a dramatic photograph by Adams of the entrance to the Park.



These pictures show Adams' interest in verticals and in the sculptural qualities—a characteristic of his work. Like several other pictures with this article, they are deliberately paired in "Hungarian Art Director Style." Mr. Adams did not so arrange them.

Adams' Sierra Nevada pictures and suggested the publication of a portfolio of prints. Bender told Adams that if he would bring out the portfolio he would order 10 copies. Later he sold 50.

The portfolio was issued in de luxe fashion by the famous Grabhorn Press. It is now a collector's item.

"I am afraid that the typography and the case were more notable than the pictures," Mr. Adams said. "However, looking at these photographs, I am able to see certain personal characteristics of my work which were even then starting to emerge."

By 1929 Adams was being pulled in two directions—

Two photographic designs—as seen by Adams, but as juxtaposed by the layout man. "The Rio Grande" and "Glaciated Rock."





SUTRO GARDENS — 1933

toward a career as a concert pianist and toward photography as a profession. The following year he decided to throw in permanently and forever with photography. "I felt that I had found my life work," Mr. Adams said.

In 1928, 1929 and 1930 Adams visited New Mexico for the purpose of taking pictures. Out of those expeditions grew the book, "Taos Pueblo," for which the distinguished Mary Austin

wrote the text. The work included twelve specially prepared landscape photographs, done on Dassonville paper. "I believed then and believe now that there has never been photographic paper to compare with Dassonville's," Adams said. "It was with great regret that later I was forced to abandon it when my photographic style came to demand the maximum sharpness and detail."

In 1929 Ansel Adams met Edward Weston. "The esthetic power and the stark, simple directness of the man won my admiration and had great influence upon my photographic development," Adams said. About the same time in New Mexico he met Paul Strand. "He had only negatives to show me but they were a great revelation," Adams declared. "Strand and Weston had an important part in developing my style and, indeed, my whole conception and philosophy of photography."

It was about this time that, in pursuit of maximum sharpness, detail, gradation and print quality, Adams bought some glossy paper and made his first prints upon that type of surface. "The results were rather dismal," he said. "I then came to realize that the concept of a photograph must be clearly thought out even before the shutter is clicked. Nowadays I have clearly in mind

from the very beginning the final photograph or reproduction. Composition, exposure, development and printing—all are visualized from the start and are so directed as to culminate in the picture I want."

Slowly but surely Ansel Adams' fame as a photographer and writer spread. In 1934 The Studio Publications Inc. of London and New York asked Adams to write an illustrated article for "Modern Photography," the annual London photographic year book of that time. Adams did so and the article attracted so much favorable comment that The Studio Publications asked him to prepare a textbook in photography, to be called "Making a Photograph—an Introduction to Photography." This book was highly successful and is still in circulation.

In 1938 Adams turned again to his beloved mountains; the result was a book called "Sierra Nevada—the John Muir Trail." Brought out by the Archetype Press of Berkeley, with the reproductions by the Lakeside Press, Chicago, this was a notable book and contained some exceptional pictures.

Collaborating with his wife, Adams published a children's book called "Michael and Anne in the Yosemite." He and his wife likewise prepared "An Illustrated Guide to the Yosemite," which is a "must" for every tourist who visits the famous park.

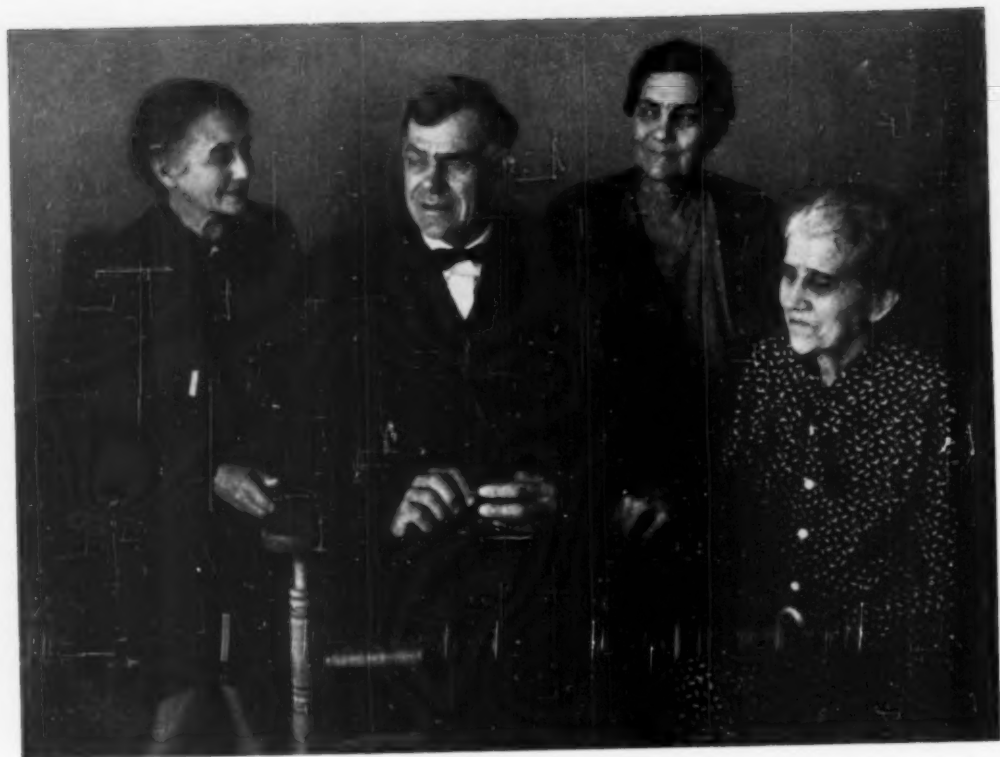
Perhaps the most unusual book of Ansel Adams came during the war. He had been teaching in Los Angeles and at Fort Ord but felt that he was not contributing much to the war effort. Then he met Ralph Merritt, head of the War Relocation Center at Manzanar. Merritt told him about the conditions at the Manzanar Camp,



J. Malcolm Greany
ANSEL ADAMS, FPSA

Below — In these two photographs side by side you can feel the design sense of Adams. The comparison is neither the authors nor Adams. Is it justified? The one on the left is a scene in the Sierra foothills and the other is a composition of boards.





"Family Portrait," taken with a Contax camera, shows Adams' skill in the handling of people and the arranging of groups.

where were located many of the Japanese who had been removed from their homes along the Pacific Coast. Adams was so taken with what Merritt said that he determined to bring out a book of pictures telling how these Japanese-Americans were seeking to make a new life for themselves behind barbed wire. Adams' book, "Born Free and Equal," created quite a stir and resulted in improving the conditions under which the Japanese were held.

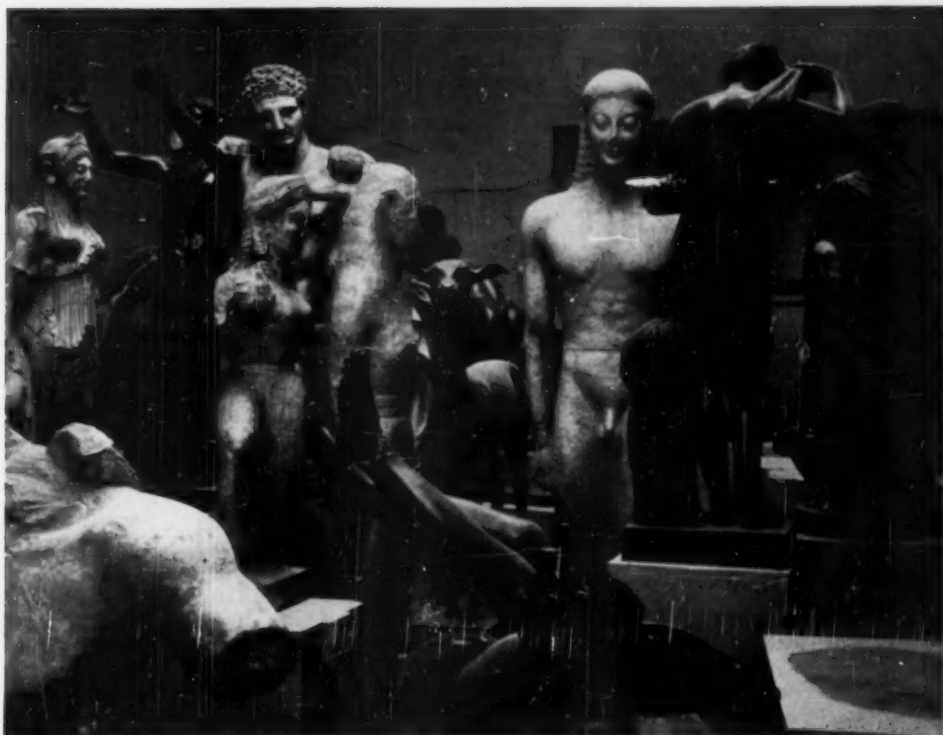
In addition to numerous magazine articles on photographic subjects, Ansel Adams next started his "Basic Photo Series." Volumes 1, 2 and 3 have already been brought out. The fourth volume is due to appear early in 1951. When completed, the Series will set forth Mr. Adams' philosophy and methods concerning photography, including his somewhat complex but exceedingly effective "zone system" of exposure.

"I think I may say they are important books, but they are not 'popular'," Mr. Adams said. "They do require considerable study and I am afraid that the average photographer fears anything which demands mental effort. The casual and lazy basis upon which most photographic

study and instruction are carried on is nothing short of a tragedy. I do not know a photographer—and this includes myself—who is willing to work half as hard as any musician is required to work to attain even average proficiency with his instrument."

In 1948 Adams published "Yosemite and the Sierra Nevada," with selected text from the writings of the famous naturalist, John Muir, and 64 photographs by Adams. In 1949 he realized an ambition of long standing with a book called "My Camera in the Yosemite Valley." This large and handsome book includes twenty-four magnificent photographs and an essay on mountain photography. It was an instant success and this encouraged Adams and the publishers, Virginia Adams and Houghton Mifflin Co., to issue a series of "My Camera" books, to include "My Camera at Point Lobos" by Edward Weston and "My Camera in the National Parks" by Ansel Adams.

The latter work contains 30 photographs selected from several thousand which Mr. Adams has made of the national parks and monuments of the United States. The



"Museum Storeroom" is a scene that would be overlooked by a photographer with a less keen eye for design than Adams.

photographing of these parks was undertaken under a fellowship granted by the John Simon Guggenheim Memorial Foundation. The terms of the award call for the taking of pictures and writing of the text for an elaborate book on the national parks.

A recent undertaking which gave Adams much satisfaction was the bringing out of "Portfolio No. 1." This is a limited edition of 75 copies of a portfolio containing 12 original prints. It is dedicated to the late Alfred Stieglitz, whom Ansel Adams met in 1933, and who exerted a vast influence upon him. "I enjoyed a long and close friendship with Mr. Stieglitz," Adams said. "His thoughts, ideas and philosophy exerted a profound influence upon my work." Adams exhibited in Stieglitz' *An American Place* in 1936.

Ansel Adams has completed "Portfolio Two" which contains 15 original prints from negatives made in the national parks and monuments. The edition is limited to 100 copies.

Teaching has been an important part of the career of Ansel Adams. Several years ago he taught at the Art Center School in Los Angeles and was so successful that

he was asked to establish the photographic department at the California School of Fine Arts in San Francisco. "This was a project which I enjoyed a great deal," he said. "So far as I know this is the only school of photography which concentrates with whole-hearted energy upon theory, basic techniques and esthetics. I have the feeling that most schools give too much attention to the professional aspects of photography—advertising, fashion, portraits and the like—and not enough to the fundamentals upon which sound photography must be based." After getting the school firmly established, Adams turned its direction over to Minor White.

Other teaching by Mr. Adams has included lectures and exhibitions at the Museum of Modern Art in New York and similar instruction elsewhere. He has also had exhibitions of his work in nearly every large city in America as well as in London, Paris, Canada, Australia, etc.

The vast majority of the pictures which Ansel Adams exhibits are contact prints made with an 8 by 10 camera. "I prefer to work with a camera of this size," he said, "although my equipment includes other cameras down to and including a Contax, all of which come into frequent



Dunes, White Sands National Monument, New Mexico, from Adams' latest book, "My Camera in the National Parks"—another example of the superb use of design.

use." Mr. Adams does not adhere rigidly to the 8 by 10 dimensions. "I occasionally trim my pictures in order to improve them," he said. "However, before taking the picture I visualize exactly what it will finally include and thus the trimming is not an afterthought."

Thousands of Mr. Adams' negatives have been taken in the Yosemite Valley, where he makes his home. The Adams residence in the midst of the scenic wonders of this matchless park is the envy and despair of other photographers.

Mr. Adams was asked whether there are any types of photography which he dislikes. At first he said there were none. Then he admitted having no love for tabletop pictures. "I feel that such photographs are contrived," he said. He also expressed no fondness for propaganda pictures "which reveal things out of their true context and hence very often tell a lie."

Mr. Adams also expressed some outspoken opinions concerning much of the photography which is sent to the salons. "I feel that most salon photography is a form of emotional doodling, lacking in originality and creativeness," he said. "Salon photographers would make great advances if they would only realize the impact which their creative work could have upon their environment and their country."

"Every photographer should adopt for himself a definite creative project and proceed to carry it out with all the earnestness he can command. Such a project would advance him much further and faster than carrying on photography as a mere hobby, with only entertainment in view."

Ansel Adams at the present time does considerable work in color. "However, most of my color photographs are made largely on a 'bread and butter' basis, in order to earn a living," he said. "My great interest in photography as an art form continues to rest in black and white pictures. However, I hope soon to carry on extensive studies and experiments in an effort to evolve for myself a philosophy which will embrace photography in color."

In a life filled with taking pictures, writing and teaching, Ansel Adams has had little time to belong to organizations. "The Sierra Club, the Photographic Society of America and the American Society for Esthetics are the only organizations to which I belong," he said. A recent honor—one of many which Adams has received—was being voted a Fellow of the Photographic Society of America. He admits that this pleased him, even though he said: "I have a profound abhorrence for titles, letters, medals and honors. These things are precious to some people, but it is, I think, bad taste to display them."

Colorful MEXICO

Beckons

The Photographer

HELEN C. MANZER, APSA



STORM CLOUDS OVER CHAPALA

Bernard G. Silberstein, APSA

"COLORFUL" is the first word that springs to our minds when we think of describing Mexico, for Mexico is truly a land of color. From the moment the visitor crosses the International Bridge over the Rio Grande at Laredo, Texas, and finds himself in the Mexican town of Nuevo Laredo, he is surrounded by a culture which in scores of ways is markedly different from his own. To the photographer, the outstanding difference is the profusion and variety of color. In contrast with so many American towns that seem drab and monochrome, the yellows, oranges, reds, and blues of the average Mexican town make a deep impression upon the visitor.

The clothing of the people, the houses in which they live, the fruits and other foods, the vegetation, the panoramic landscapes with blue sky and fleeting clouds,—all these arouse the interest and imagination of the color enthusiast. It is, of course, impossible in Mexico or anywhere else for one person to point out ready-made pictures to another. As we know, a picture is not only a pleasing arrangement of external elements, it is also an interpretative expression of the imagination of the individual. The visitor will be able to utilize these treasures pictorially in almost direct proportion to the richness of the background he brings to Mexico. This is to say, pictures seldom cry out to be taken; they must, rather, be coaxed and invited by the imagination of the artist.

Colorful as Mexico is in this literal sense, its colorful quality is even more impressive in the personality, occupations, and cultural patterns of its people. In this land we encounter racial types, social relationships, customs, and philosophies of life which antedate most of our own by many centuries. Approaching such an ancient culture

with respect, mixed with a touch of reverence, the visitor will find an unending series of situations that are esthetically stimulating. A photograph consisting of a pleasing composition of colorful objects is usually interesting, but a picture that fuses surface color with the colorful in this second fundamental sense combines with interest a profound and enduring satisfaction.

To realize fully the pictorial opportunities that await him in Mexico, it is highly desirable that the visitor from the United States travel in his own car. A car is a most convenient base for photographic operations. In it cameras and other equipment are almost immediately available and completely safe. Travel by car throughout Mexico is as easy and convenient as travel by car throughout the western part of the United States. Gasoline in Mexico is abundant, reasonably priced, and available at convenient intervals. In the several thousand miles I have covered by car in Mexico, I have not encountered even the slightest unpleasantness or discourtesy. On the contrary the people are eager to do all in their power to help the stranger enjoy his visit.

On one occasion, for example, I had parked at the side of the highway to take some pictures of the landscape. Before I had set up my equipment, a big interurban bus slowed down and stopped ahead of where I was standing. Instantly the driver and his helper sprang out, followed by several other men. They asked me as best they could (I know no Spanish) what my difficulty was and whether or not they could give me any assistance. I smiled, pointed to the camera and gestured toward the landscape. They caught the point, everybody laughed, climbed aboard the bus, and off they rolled. At another



REVERIE

Elbridge G. Newhall, APSA

time, I needed water for the radiator of my car. Two boys on bicycles came by, stopped of their own accord, and after learning the nature of my problem, disappeared down the road toward the next village. In a few minutes they returned, each carrying on his shoulder a large can full of clean water. They insisted on pouring the water into the radiator themselves, smilingly accepted a peso each as an expression of appreciation, and went merrily on their way. Experiences of this kind have been repeated many times during my visits in Mexico.

I have been asked frequently about the condition of the roads in Mexico, the adequacy of the over-night accommodations, and about the food. The quality of the roads, of the hotels, and of the food depend not only upon the actual facts, but also more directly upon the personality, temperament, habits, and emotional flexibility of the visitor. Many persons who visit a country outside the United States, such as Mexico, mar their visit by a tendency to make comparisons between the conditions to which they are accustomed in the United States and those they find in the foreign country. The visiting photographer, in my opinion, will be wise to avoid this tendency and to think of Mexico and the conditions there as manifestations of a civilization and culture different from his own, but not necessarily either better or worse. Some of this inclination to make comparisons is an outgrowth of fear. The mere fact that the country is strange arouses fear in some people, but if

my experiences have been at all typical, I can assure the reader there is nothing to be afraid of in Mexico.

With respect to the difference in language, there is no denying the fact that a knowledge of Spanish is a very real advantage. In my case, however, in spite of my lack of Spanish, I have been able to get along satisfactorily both with respect to personal requirements and also in the taking of color pictures. I have found the people of Mexico remarkably alert, insightful, and solicitous. A pleasant, reassuring smile, combined with expressive and to them often amusing gestures, goes a long way toward bridging the gap of difference in language.

Camera Equipment

The choice of equipment for color photography, as for photography in general, is largely a matter of personal taste. In my own case, I use the Leica exclusively, for this camera is portable and combines maximum precision with a high degree of sturdiness. Unlike black and white photography in which the final composing and format may be made by trimming or under the enlarger, color photography requires that the final composition be made at the time of exposure. For this reason interchangeable lenses provided by the manufacturers of the Leica camera are extremely useful. In this connection it is interesting to observe that the view-finder made for the Leica serves a two-fold purpose. In addition to its regular use for determining the field of view and correcting for parallax at the time of exposure, this view-finder, because it can be adjusted to the field covered by any one of the several lenses that can be screwed into the Leica camera, is useful in helping to decide which lens to use in order to include the boundaries of a given picture under consideration. Because this view-finder is readily removed from the Leica camera, I usually take it to a likely picture spot even before the camera has been taken from its case. By looking through the view-finder at the proposed picture, I can decide upon the location of the camera, the angle of view, and the lens that is to be used to give to the picture the exact format decided upon while looking through the finder. A firm tripod, one easily set up, is, of course, essential for serious work in color photography. I might suggest here that the photographer, particularly one who may have imported equipment, register his cameras and lenses with the United States customs authorities at the point where he enters Mexico. Such registration in advance will obviate any possibility of misunderstanding concerning duty upon the photographer's return to the United States.

Supplies of Kodachrome are available in several of the larger cities of Mexico, and I understand from other workers that satisfactory processing is also done there. Because I prefer to use the magazines or cassettes made for the Leica camera, I buy 35mm daylight Kodachrome in hundred-foot rolls and wind five-foot lengths of this film into the Leica magazines. After the film in a number of these magazines has been exposed, I unload the magazines in an improvised darkroom, wrap the film in tissue paper, and store it in light-tight cans. These

cans of exposed but unprocessed film I bring back into the United States and send to Rochester for processing. In Mexico during the rainy season I have found that light conditions often change very rapidly. Thus one's opportunity for picture-making, especially portraits, may be lost if it is necessary to interrupt the series of exposures in order to re-load the camera. For this reason, in my own color work, I use two cameras, thus permitting rapid change after the film in one camera has been completely exposed.

San Miguel de Allende, a Typical Colonial Town

Where, specifically, may one go in Mexico for interesting color pictures? Any of the smaller towns is rich in opportunities for color photography. A particularly good choice is San Miguel de Allende. When I first undertook to visit San Miguel, I reconciled myself to travelling over the sixty miles of rough gravel road which the map indicated as extending between the pavement and the town. As soon as I turned off the pavement my expectations were fulfilled, for here I found a gravel surface over which I adjusted my speed to barely fifteen miles an hour. Imagine my surprise, when at the end of a half mile of this kind of road, there opened before me a brand new pavement, perfect in every respect, all the way to San Miguel. Later I learned that this new section of highway had been opened to traffic less than a month before my visit. After having visited San Miguel de Allende, I feel that this town would certainly have been worth a visit even though it had been necessary to travel the kind of road I originally expected.

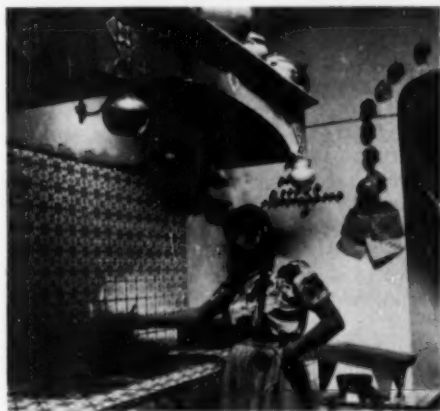
San Miguel is situated to a considerable extent on the side of rather steep hills. The town is entered from above; the main street, paved with ancient cobble stones so common in Mexican towns, is steep and winding. Cars and busses go up and down, many of them at high speed. The photographer, however, will be wise to leave his car in the locked garage provided by the hotel and go about on foot with his equipment. San Miguel de Allende is considered a typical colonial town of Mexico. Its plaza and ancient buildings were at one time somewhat in disrepair, but at the present time the buildings and other artistic features are being restored by the Mexican government, without detracting in any way from their quaintness and charm.

In San Miguel there are two or three good hotels. I stayed at the Posada de San Francisco on the plaza. In a side street was the locked garage, already referred to, where my car was both conveniently located and safe. In passing, the artistic importance of San Miguel is further established by the fact that in this town is located an important art school which draws students to a very considerable extent from the United States. It is not easy to specify the precise elements in San Miguel that may be interesting to the color photographer, so much depends upon individual taste and preferences. I found my greatest interest in the people as they went about their everyday affairs between their homes and the marketplace, the variety of delicate pastel tints on the walls of

the dwellings, the old doors many of them richly carved, and the grilled windows of the ancient buildings.

During part of my stay in San Miguel, I selected a background of these tinted walls and old doors and set up my camera and tripod. Pictures were taken as interesting individuals and groups moved into the desired relationship to this background. In this way I made the picture entitled, *The Conversation*, which was accorded honors in several salons this year. The streets in San Miguel devoted to the market offer all kinds of opportunities for color photography. Here are displayed earthen jars and other utensils that vary in color from natural clay through yellow and orange to deep red. Some of this pottery is decorated with delicate designs and though made primarily for use is esthetically satisfying in proportion and line. A close approach to ready-made pictures will be found in scenes of genial craftsmen seated here and there among their wares. One man, for instance, was almost completely surrounded by dozens of shoes of various styles, sizes, and colors displayed on the pavement, all the while he was busy making still more shoes soon to be added to his stock. An unusually picturesque note in the San Miguel market consists of the large sunshades made of big squares of white cloth. Fastened to a wooden frame on the top of a sturdy post, they are opened out as the sun rises higher, affording protection to delicate wares as well as providing shelter for the people. These big white sunshades are centers for casual conversation between merchant and visiting friends. They are also useful in making a shady place in which to take a little snooze during an interval when business is not too brisk.

Accommodations at the Posada de San Francisco are more than satisfactory both with respect to over-night and food. The dining room is on an upper story at one end of a large patio. Tables near the window open on the entire plaza of San Miguel de Allende. Here one can follow the colorful and ever-changing activities in the plaza while at the same time enjoy an appetizing meal.



MEXICAN TILED KITCHEN

Nelson Morris

Fortin: Flowers and Mount Orizaba

The visitor interested in the photography of flowers should by all means pay a visit to Fortin. This little town, which does not appear on all the maps of Mexico, lies between the cities of Orizaba and Cordoba on the highway that extends from Pueblo to Vera Cruz. In addition to the large hotel, there is in Fortin a little place which I consider a gem for those interested in flower photography.—Posada Loma, located exactly at the road marker 333 kilometers. To the visitor, as he rises into the paved dooryard up the ramp from the highway, the Posada appears to be the private residence of a wealthy family. And this is just what the Posada is with the addition of several of the most substantial and comfortable little houses for visitors that could possibly be imagined. The man and his wife who own the Posada are very intelligent and affable people. The gentleman speaks only Spanish but his wife, with a fair command of English, is able to make the visitor's stay a delightful experience never to be forgotten.

The gardens and grounds about the Posada are a veritable nursery of tropical and semi-tropical flowers. Here on the trunks of the trees and in wicker baskets suspended from the lattice-work of the vine-covered pergolas are orchids and related plants of every kind, shape, and color. As would of course be expected, the flowering of such plants is highly seasonal, but it can safely be said that, irrespective of the time of year, the visitor can look forward with certainty to something of unusual interest at Posada Loma.

My own visits have been made the latter part of June; at this time many of the orchids were just bursting into bloom. One in particular, of which my host was especially proud, celebrated my visit with five large flowers the very day I arrived. Here for the first time I saw a complete flower of the banana palm and it was here also that I made my color pictures, *Cup of Gold* and *Hibiscus* which have been widely exhibited.

Our interest at Posada Loma is not confined to flower photography, however. A description of this fairyland would be incomplete without referring to the extraordinarily appetizing food served in the luxurious dining room. Fortin is below the edge of the plateau, is semi-tropical, and therefore provides a profusion of delectable fruits. On these the Posada draws for fruit-cups and desserts. When the visitor inquires concerning some delicacy he is enjoying, he is surprised to learn that it is a cactus bud or the fruit of the maguey plant. Other delicious fruits include tree-ripened papaya and mangoes from Manzanillo.

The dining room of the Posada is so situated that when the large arched doors are opened they afford to the visitor a view which has brought fame to Fortin. For here can be seen Mount Orizaba in all its majestic grandeur, snow-capped throughout the year, third highest peak on the North American continent. With its cone-shaped summit, somewhat resembling Fujiyama, the sacred mountain of Japan, Mount Orizaba is an unforgettable sight. This peak, because of the changing,

vaporous clouds, has a curious and almost wraith-like way of appearing at one moment bold and clear, then a few minutes later, disappearing among the clouds so completely that even its direction remains in doubt. On my first visit to Fortin I learned that daybreak was the most promising time for pictures of Mount Orizaba. I made careful plans with respect to choice of camera position, got up at daylight and secured some very satisfactory color pictures of Mount Orizaba at five-thirty. On another visit to Posada Loma, while photographing flowers in the garden, I was surprised to see Mount Orizaba clear and distinct at three in the afternoon. For good color pictures, we must often plan carefully in advance and wait patiently to get the coveted shot. At other times, pictures equally good are made on the spur of the moment.

Oaxaca and Its Ox-Carts

On the drive southward from Mexico City through Pueblo to Oaxaca, the photographer will be treated during the rainy season to a continuous panorama of varying purples and blues, illuminated by constant changes in the clouds and the play of light overhead. This part of the Pan-American highway, one of the most recently completed, traverses rugged mountains. The pavement is excellent even though the grades and curves are frequently steep and sharp. The broad and simplified tone effects obtainable throughout this journey will amply reward anyone in search of dramatic color landscapes.

Oaxaca is one of the largest cities in southern Mexico. Just north of the city limits the highway rises to a considerable elevation from which a view of the city's grandeur spreads out before our eager eyes. High above this elevation stands a majestic bronze statue of the Mexican patriot, Benito Juarez, a contemporary of Lincoln. On his granite pedestal, Juarez extends an affectionate and proud gesture over Oaxaca, the city of his birth.

Like other populous places in Mexico, Oaxaca contains a wealth of pictorial possibilities for the industrious visitor. I have found the crossroads on the outskirts of Oaxaca especially attractive. For at these crossroads throughout the day, but particularly in the morning and late afternoon, there are steady streams of men, women and children. Most of them are on foot, some are riding burros. Frequently, the men and boys are guiding burros trudging under loads of alfalfa or corn stalks so huge that the little animals are all but completely hidden from sight. A unique characteristic of these crossroads is the ponderous wooden carts with two great wheels, each cart drawn by a pair of oxen. In this part of Mexico even the oxen are pictorial. The yoke is fastened to the heads of the animals with long strips of rawhide bound about the horns and, in addition, there is a large shield-shaped piece of wood, fashioned by hand, above and behind the head of each ox. Many of the carts have a high framework over which are fastened sheets of yellow matting. Other carts, uncovered, are loaded with rich green alfalfa to a height of nearly ten feet. These great lumbering carts avoid the paved highway, preferring rather the dirt



TRANQUILLITY

Helen C. Manzer, APSA



INDIAN SUMMER

Helen C. Manzer, APSA

roads where they sway and grind, completely indifferent to rocks, ruts, and deep water-filled holes.

In the construction of the Pan-American highway, the earlier roads have, of course, not always been followed exactly. South of Oaxaca the old road and the new highway are only fifty yards apart. At one place the old road, still preferred incidentally by the people, burros, and ox-carts, goes over a stone bridge. The bridge is rather ornate with panelled side-walls and a high stone urn on each of the four corners. Such a location makes an attractive background, carrying with it as it does atmosphere and associations of the remote past.

Is it any wonder that among such scenes the color photographer works on continuously throughout the day, forgetful of time and unaware of hunger or other mundane demands. After an exciting day spent in the outskirts of Oaxaca, the photographer can return to the city where excellent accommodations await him. There are two or three hotels in Oaxaca which I understand are good. I stayed at the Oaxaca Courts, where living quarters and food are inexpensive and as high in quality as any I have found in the United States.

Tehuantepec: Costumes in the Market-Place

Nearly four hundred miles south of Oaxaca we come upon the town of Tehuantepec, well worth a visit by the color photographer in spite of its remoteness. The town itself is old and primitive with a characteristic plaza. During my visit to Tehuantepec, I was impressed by the variety of colorful costumes worn by the people, particularly by the women. Orange, red, and yellow seemed to predominate. A black skirt with orange or red blouse and a yellow flower in the hair was not uncommon. Several of the women, walking back and forth across the market-place carrying baskets of bananas or mangoes on their heads, wore red, black, or chocolate-brown skirts

at the bottom of which was a deep flounce about ten inches wide and extending to the ground.

Tehuantepec is below the southern edge of the Mexican plateau and so has a semi-tropical climate. Nearby the tropical vegetation is luxurious with groves of banana palms and flowers unfamiliar to the visitor from the United States. Market day in Tehuantepec is an occasion of unusual opportunity for the color photographer. At this time we see a blend of the brilliant costumes and the rich variety of orange and yellow tropical fruits displayed in the shops and on the sidewalk. The tan and pale yellow oxen drawing the heavy wooden carts bring an added dash of color to the market-place. Life in Tehuantepec is leisurely and happy; the people are unhurried and genial. The visitor should adjust to this tempo so different from that of his own country now fifteen hundred miles to the north.

Lake Patzcuaro and the Fishermen

Outside of Mexico City itself, Lake Patzcuaro is undoubtedly one of the places in Mexico most often visited by color photographers. Thirty miles off the main highway to the West, Lake Patzcuaro is easily reached over a paved road. There are two or three good hotels among which my favorite is the Posada de Don Vasco. A few hundred yards up from the main crossroads, this hotel provides the visitor with comforts and conveniences far beyond any he might expect. One of my biggest surprises in Mexico was finding a hotel of the quality of this Posada in such a remote place.

One of the few lakes in Mexico, Lake Patzcuaro is comparatively shallow, bordered by grassy growth, and surrounded by low, undulating mountains. There is a strange, almost iridescent quality about the light over the lake as it filters through a delicate haze of palest blue. The clouds, seldom very high in the sky, form a decora-

tive wreath above the encircling mountains. The lake is teeming with fish scarcely finger-length in size. These fish are an important source of food for the Tarascan Indians who live in the villages around the lake and on the islands in the lake.

The fishermen, using their famous dugout boats, each made from a single huge log, scoop up these little fish in gigantic dip-nets. Because of the way in which these nets are handled by the men and carried about on the big boats, they have come to be called "butterfly nets." The graceful curves of their bamboo rims, as the nets are wielded at varying angles, set off the lacy white of the nets themselves. The fishermen, many of whom have pointed black beards, wear white clothing and large broad-brimmed sombreros.

Some of the men on Lake Patzcuaro engage in fishing on a scale considerably more extensive than that of the butterfly fishermen. Working in groups, they surround great quantities of fish with large nets or seines. Typical of this kind of fishing is that done by the Indians on the island of Janitzio. Much of their fishing is done at night; the men sleep most of the day. During the daylight hours, the stair-like paths and alleys on the island, so steep and rugged that not even a burro can traverse them, are festooned with yards and yards of nets drying in the sun. The women of Janitzio spend much of the day

drying the fish, turning them over and over on large rectangular mats woven from palm leaves. Here and there a lone man is mending a net, preparatory to the next night's fishing or busily engaged in the weaving of a new net. Such quaint material and activities against a backdrop of time-worn houses and deep blue sky with ever-changing clouds amply justify the fame and popularity associated with Lake Patzcuaro.

People and Portraits

Because the making of portraits and character studies is somewhat personal and intimate, this type of photography necessitates special care and planning. Mexico is populated by people who, from the point of view of the visitor, are highly pictorial with respect to personal appearance, dress, and activities. The securing of pictures of this kind presupposes in the photographer such qualities as courtesy, and friendliness, as well as the capacity to adjust emotionally to people whose language and culture are different from his own. Such adjustment should be on the basis of democracy and genuine equality.

Many of the Mexican villages seem to be organized socially after the analogy of a large friendly family. Everybody not only is acquainted with everybody else in the village, but knows him and his personal affairs in minutest detail. The children, older boys, girls, and younger women look to the older women and men for advice and guidance in an unfamiliar situation such as the arrival of a stranger. It is, therefore, frequently helpful to make the acquaintance of the one man to whom most of the other members of the village ultimately look for advice. Having gained the good will and cooperation of this man—the presidente—the making of portraits is a straightforward and delightful experience, not only for the photographer, but also for his newly-made friends of the village.

From the standpoint of the people, life in the village seems routine and monotonous at times. A friendly visitor with the approving sponsorship of the presidente coming into the village with a shiny automobile, interesting camera equipment, strange language, movements and behavior never before seen, sends thrills of pleasure and curiosity through the village. The photographer who can harness and direct this enthusiasm is practically assured of satisfactory portraits.

Because, as has already been said, my visits to Mexico have been made early in the rainy season, I have found it necessary to make color portraits by arriving in the village in the morning, setting up my equipment promptly, and working continuously until about noon. By midday not only is the sun too high overhead for good portrait lighting, but also by this time clouds are often developing in sufficient volume to throw the light off balance. But there is always another day, so we can return the next morning for more pictures.

In view of the difference in language between the photographer and his prospective models, it is necessary to allay the bashfulness that is inevitable at first. For this

TAXCO PLAZA ON SUNDAY

Gordon C. Abbott, FPSA



reason it is advantageous for the visitor to locate for several days near the village in which he has made acquaintances. The first part of this period can be devoted primarily to getting better acquainted. After he has become an old story in the life of the village, his problem will be one of selection from among the large number of available models,—men, women, children, and mothers with cute little babies,—each eager for his turn in front of the lens. Using the Leica camera as I do for all my photography, I find the longer focus interchangeable lenses particularly useful in portraiture. The 90mm lens coupled directly into the camera and the 135mm lens with short focussing mount in the reflex housing are both excellent for this kind of photography.

In making portraits and character studies of people we meet in Mexico, it is only natural that we should try to make the most of their interesting and frequently beautiful dress. The photographer, in his efforts to make an outstanding picture, is likely to bring to bear upon the situation all the skill in costuming, draping, and posing that he possesses. Such efforts should be carried out, in my opinion, with great restraint. The people with whom I have worked have seemed to be almost universally graceful and possessed of a knack of both draping and posing that seems highly effective. This is to say, if the model is given time to overcome temporary diffidence and is permitted to take a normal pose with dress arranged according to customary lines, there will usually result a picture that is not only good photographically, but also one that has the qualities of freshness and freedom.

Custom and Tradition

As is true in most age-long cultures, custom and tradition as well as conformity to established social patterns are deeply fixed in the people of Mexico. These people seem most sensitive to dress or behavior that is inappropriate or which might bring upon them the ridicule of their friends. There is a high degree of conventionality with respect to dress and all attempts at artistic effects must take these sensibilities into account. Early in my contact with the people in one small village, I attempted to pose an unusually attractive girl wearing a broad-brimmed sombrero such as those customarily worn by the young men. The merest hint that she might put on the sombrero was met with scornful refusal. Regardless of how attractive one might consider a girl wearing a hat, it is inadvisable to attempt to pose girls and women with hats because they regard the hat as a symbol of masculine dress and status. In this type of picture-making, as is so often the case, the straightforward way is the best way and the natural becomes the most artistic.

In no phase of picture-making is background more important than in character studies and portraiture. So often an otherwise excellent and moving portrait is marred by a background that has not been given sufficient consideration or one unwisely chosen. I try to avoid the studio kind of background, one which suggests that the portrait might have been made anywhere. Rather, I seek



FISHERMAN ON LAKE PATZCUARO

Leo Pavelle

for backgrounds that not only enable the attention of the observer to be strongly concentrated on the features of the model, but which also, in a subdued and harmonious way, give a subtle suggestion of the model's locality and culture. The latter kind of background is admittedly difficult to secure, but nonetheless, when the selection has been successful, it greatly enhances the vitality and appeal of the portrait.

Satisfactory backgrounds in a Mexican village can often be found in the old walls made of large pieces of lava that so often extend along both sides of the main streets. These walls, subdued in color and adorned here and there with delicate vines and tiny plants, provide a harmonious and interpretative background when given the appropriate degree of softening through differential focussing. Where light conditions make necessary greater flexibility of movement and camera position, a dark-colored serape without objectionable pattern is useful as a background. On occasion I have used as background material the large rectangular mats woven from palm leaves. These mats are light in weight, easily put into position, and have an interesting texture. When it is desirable that the background be in sharp focus, the soft-toned walls, doorways, and windows of the Mexican houses may be used.

It is unnecessary to emphasize the obvious fact that in a single article it is impossible even to mention all of the photographic attractions in Mexico. What has been attempted here is the introduction of the reader to the pictorial delights of Mexico, some of them off the path so well trodden by the tourist. I hope that by sharing my experiences, the curiosity and enthusiasm of the color photographer have been aroused so that he will enjoy the kind of picture-making I have enjoyed. It is also my hope that by giving his individuality opportunities for free expression, he will return to the United States with his own collection of pictorial gems drawn from that inexhaustible treasure-house of art potentialities which is Mexico.

Gray Scale and Tone Control

DAVID DARVAS, APSA *

FOR MANY years, the belief was common that control techniques were technical twists, requiring no thinking, other than a step and repeat system of mechanics established for that particular method. This and that process trick seemed like some magic cure-all, whose practice, however, sometimes made the resulting prints conspicuous by their lack of brilliance. The truth is that the technique was considered as the key to success, while fundamental principles were forgotten.

The aim of control technique is a perfection—a glorification—of the subject and an ultimate realization of tone quality befitting the aesthetic portrayal of the idea.

The first technical consideration of any photograph is the appeal it has visually, through its basic influence of tone rendition. Tone rendition is the elusive factor, because it is the least understood. It is the most important visual requisite, easily recognized when seen, but rarely analysed correctly.

Tone rendition is the basic influence capable of glorifying a photographic image into a picture. With it, inferior subject matter takes on a powerful visual impact. Without it, superior subject matter suffers.

The study of tone rendition demands a fundamental knowledge. It is this knowledge of tone—what it is, where it should be placed, and, more important, WHY—that makes one photographer a better dark room "printer" than another.

Without the basic root, the foundation of technique, any attempt to control a process is useless.

This basic root is knowledge of the gray scale!

It is the gray scale!

It is the religion of brightness, so primary, so basic, that without it photography could never exist!—And yet, it is almost completely ignored! No one can really understand tone quality until he understands the gray scale.

* Lecturer on PSA National Lecture Program. See announcement elsewhere in this issue on Mr. Darvas' Spring Tour.



FIGURE 1

How to improve print quality through the use of the gray scale

Amazingly enough, every photographer knows and recognizes the gray scale when he sees it. He knows that photographic laboratories use the scale as a means of testing sensitive products; but to him it's just a sensitometer's gadget. Yes, he has used the gray scale now and then, when testing the range of paper. But of its visual, mental and illusionary aspects, and of its psychological power of attraction, he knows very little. It is the "WHAT" of photography that answers the questions of why, where, when, and the technical how.

What is the gray scale?

The gray scale is a measure of relativity between two basic influences, complete brightness and complete darkness. It is a means of calculating percentages of brightness, any distance between white and black. It is a visual tone scale of a photograph. It is just what the musical tone scale is to a symphony.

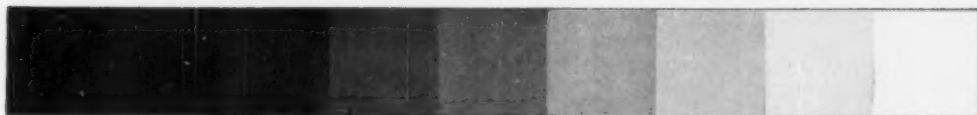
The gray scale is the purest photograph anyone can ever produce, because it is the true product of the photographic environment. Any photograph is a direct result of its technical and visual adaptation. We can arrive at a definite conclusion that photographs are modified gray scale images, organized into a familiar pattern that our senses recognize as representing realistic third-dimensional subject matter. By controlling the organized images in relative volume of grays, we can create the illusions of resemblance, distance, perspective, brightness, mood, and any characteristic realities of life.

Psychologically, when we look at a photograph we are captured by the realism of familiar subject matter. Because of this, we pay more attention to representation than to any other characteristic. Photography's aim is to tell a graphic story, but in order to control the medium, we must be able to see beyond the reflection of the story.

Suppose we made a picture of a black cat attempting to steal milk from a bottle.

When the print is made, we recognize the subjects by their shape, form and outline. Visually, there is no question of the truth of the subjects. The image of the cat looks like a black cat. The image of the milk bottle also appears truthful. See Figure 1.

Because of long associations, visual and mental, we know that black cats are supposed to be black, while a bottle of milk is supposed to look white, so even an



Black Cat

Bottle of Milk

FIGURE 1a

inferior print has some truth in it for us. It matters very little that the milk bottle is chalky. Neither do we object to the total density of the cat. We just accept them as true, based upon a preconditioning of the mind through familiarity with the objects represented.

A beginner's estimation of print quality hinges upon how easily the subjects can be recognized. It would be difficult for him to understand that the more surface textures can be made to vary in brightness, the more appeal they will have to the eye.

Read that over again! It's a rule we must never forget if we wish to know something about telling our photographic story to the observer.

In the case of the cat and the bottle, the range can, and must be alike in both subjects for the best tone quality rendition. That the cat predominates in black, and the milk predominates in white, is simply a designation of "key" value. The cat is dominated by an extreme low key value, while the milk is extremely high key.

By comparing the volume of brightness reflected by each subject, we find that they occupy a position in the gray scale as indicated in Figure 1a.



FIGURE 2

Both are in opposition to each other visually because of their opposite "key" position in the gray scale. The visual conflict between the two subjects is the same as the eye

receives from looking at the black and white extremes of the scale placed side by side, as in Figure 2.

Visual Conflict Reaction Between Black and White

By comparing the two subjects to patches of the gray scale, we have ignored what they were as subjects and, instead, we consider their relation to brightness. And we find that the visual impact received from looking at both the cat and the milk is just as disturbing to our eyes as if someone kept up a continual pounding on a piano, alternating the lowest key with the highest key.

The beginner should learn that contour differences and texture must be made visible to the eye, because that is the way we actually "see" things in real life. The only way photography can reveal those surface textures and forms is by allowing more gray values to be visible, which automatically creates a brightness similar to reality. And this requires that the subjects have the same range. This only means that the detail texture of the subject matter be made to show from black to white in proportionate amounts consistent to the "key" of the subject.

In other words, since the cat is in low key, it would predominate in black, but would also show smaller amounts of lighter tones, as the tones progressed towards the white extreme of the scale. The milk bottle, being in high key, would show surface texture tones in smaller amounts as it progresses towards the black extreme of the scale.

This could be illustrated by means of the gray scales in Figure 3 and the photograph in Figure 3a.



Tone Range of Black Cat



Tone Range of Milk

FIGURE 3

The relative volumes of tones that both contain may be different, yet both have the same range.

The study of the gray scale is one of the most fascinating subjects of photography, yet very few have thought of it seriously enough to apply its fundamentals to control processing.

Stepped Scale and Continuous Scale

To begin this study, let's consider the two gray scale roots, Figure 4, and apply them to the photographic image.



FIGURE 3a

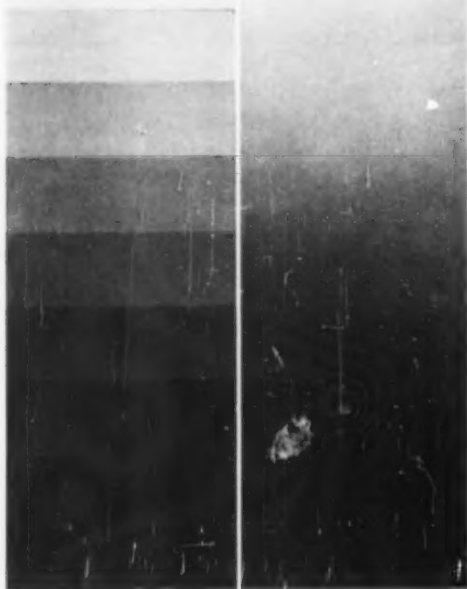


FIGURE 4

Root number one is the stepped scale.

Root number two is the continuous scale.

Both are alike by nature, yet each has a different story to tell. Each can exist alone as a scale, but rarely in a photograph. Both are needed in the construction of a photographic image, but cannot be used together as a scale.

The images of photography are combined through the use of both the stepped and continuous scale, fused together in the negative, which has stabilized the shapes and outlines of reality that we recognize as subject matter.

To illustrate the differences between the two scales, imagine that we are on the peak of a steep, smooth hill, 100 yards long. The peak of the hill represents the brilliancy of white. The base represents black, and complete saturation. Now, let's *roll* a rubber ball down that hill. Starting from the peak, the ball touches every point on its way down, in a continuous mechanical motion. This represents the visual motion of the continuous scale. The stepped scale is represented by the rubber ball covering the same distance, but, instead of rolling, it is made to *jump* a predetermined number of times, touching definite points along the way at regular intervals.

The continuous scale depicts a steady flow and change of light intensity. The stepped scale depicts periodic changes of light intensity.

Just as the peak and the base of the hill are definite extreme points of termination, the black and white of any scale are the extreme limits of the range.

Any variation of light reflection, whether from a continuous or a stepped scale, must appear between the two

extremes. It can never reach beyond those extremes. There is a point of dense saturation of the photographic image on paper that can never be any blacker, no matter how much more it is printed. There is a natural point of brilliancy from the same paper surface that cannot be any brighter. Every image we print on paper must be organized between these two boundary stations. Those are the limitations of sensitive papers, or any white surface whereby the images are viewed by reflection.

Since the continuous scale is continuous, and the changes in brightness are continuous, the eye has difficulty stopping to study any point of the scale. Because of this, it is not convenient as a "measuring instrument."

The stepped scale, being periodic, can be used as a convenient measure because the number of steps can be counted.

There are differences between various gray scales that influence visual appeal. If, for example, the rubber ball could be controlled to bounce down the hill at regular intervals ten yards apart, it would reach the 100 yard distance in 10 bounces. This is like a stepped scale with 10 steps from white to black. The bouncing ball designates 10% differences in distance from one extreme to another. The same type of a gray scale measures 10% ratio of steps along its length, as related to other brightnesses within the scale.

Suppose we decreased the bounce of the ball and increased the number of times it bounced. Suppose the ball bounced only high enough each time to touch points along the hill one yard apart. Within the 100 yard distance it would take 100 hops for the ball to end its journey. The bounces are shorter, so each point it touches has a closer distance relationship with each other point at regular intervals. This is exactly like a gray scale that designates 100 values from black to white. The differences between each step are less because the intervals selected are closer together.

Suppose the ball bounces only one foot each time. It would take 300 bounces before it reached the bottom of the hill. Can you imagine a gray scale showing 300 separate steps? Can you imagine the visual appeal between the closely knit gray values? If the steps of a gray scale were made less and less each time, the tones would run together to such an extent that it would appear as a continuous scale to the eye.

With currently available photographic materials, it is impossible to achieve this number of tones without sacrificing contrast. If we wish contrast, we sacrifice the large number of tones. Normally, we can't have both at the same time. The trick, however, is to get both at the same time, or at least to create the illusion of having obtained both a large number of tones and good contrast. That goal is the technical achievement which produces a quality print.

By now it should be clear that the greater the number of separate tones we try to crowd into our prints, the less contrast is obtained, until a point is reached where the images will become dull and muddy. Because of our mental association to natural brightnesses that exist in real life subject matter, any dull and flat interpretation of the subjects will not be accepted by our vision. On the other hand, the greater the contrast of tones in our

prints, the greater the brightness value of the picture, and the greater the visual appeal, until another extreme can be reached where vision rebels. In either case there are limits to the low and high contrasts our visual, mental and psychological senses will tolerate.

Visual appeal is the magnetic force which attracts attention. Visual appeal varies in proportion to the contrast used to portray our subject matter. Since there is a limit of getting "not enough contrast" on one hand and "too much contrast" on the other, a balance must be struck somewhere along the line, whether referring to prints or gray scales. This balance of contrasts will be explained later, but in order to do so, let's talk about a simple psychological reaction.

Psychology of Opposition

This reaction is the force which prompts our likes and dislikes of most everything and anything we know, even gray scales and photographs. It could be termed the psychology of opposition.

Our senses of perception, as well as mental associations, unconsciously catalogue two characteristics of opposition from any neutral point. The sensations of heat, and its opposite, cold; light and darkness, large and small, and other such parallels are too numerous to mention. We have experienced such opposite impacts many times, yet no standard means of measuring them is known, except the force with which the individual himself can feel them. What may be extremely hot or cold to one person may not be recognized as such by another.

The effect which these oppositions create within ourselves becomes the basis for estimating the force such sensations have for us, and any conclusions we may reach are related to our past experiences and established precepts.

Photography deals with a specialized, yet common sensation of opposites. There is the brilliancy of light, such as the sun, in opposition to the darkness of the night. These are normal experiences. These sensations are psychologically portrayed by a print as black and white. Any visual sensations we have of reality must occur between the effective impressions we receive of daylight and darkness. The gray scale range of tone can reflect a similar impression of day and night, and we should use the scale to coincide with the realistic nature of light.

It was mentioned earlier that the white surface of paper is the brightest source of illumination the print can have. This does not mean that the paper is an actual source of light, because we know that it is only reflected light from a surface we call "white"—yet, actually, that "white paper light" is the only power we have to show images on our prints, and for that reason we shall consider paper as a "source of physical illumination."

We also mentioned that we paid more attention to the blacks we put on that paper surface than we did the whites. Actually, one depends upon the other, because it takes a percentage of black, plus a percentage of white, to make a certain percentage of gray.

Now, we are just about ready to make a gray scale. As we construct this theoretical scale, we shall also be ready to see it in a new light, with greater respect, because we

have established primary thought of it as related to simple human emotions.

Remember that much of our continuity of thought and our examples are very little removed from the black cat and the bottle of milk. This may seem repetitious. But also remember that this is not a treatise on sensitometry. It is a short discourse to provoke thinking about photographs in terms of gray, for the visual and mental reactions they can produce.



FIGURE 5

Let's place the blackest black we can make, against the whitest white of paper, Figure 5. Just as we can't experience physical comfort if we have to alternate between the effects of heat and

cold, the effects of black and white can never offer visual comfort.

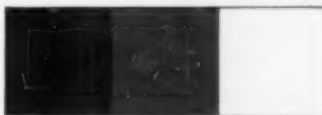


FIGURE 6

As we look at black and white, and receive alternate visual shocks, we sense the need for a balance. This

point of balance is an unconscious sensation of the average of black and white, which is middle gray. See Figure 6.

Middle Gray

Now we have satisfied our desire for balance because the middle gray is the compromising factor of the original black and white conflict.

There is something curious and distinctive about middle gray. Its exact central position in the scale makes it individualistic. It has neither a positive nor negative influence. Every other tone of the scale can be either negative or positive as a physical or aesthetic influence, because they suggest an opposite influence as well as their own. We look at black and think of white. We look at white and think of black. Black is a positive reaction in one instance, complemented by its negative, white. White can be a positive reaction in another instance, complemented by black, which, in this case, is negative. All other values of the scale are also relatively positive and negative in less and less degrees of opposition as they come closer to middle gray.

The unusual nature of middle gray is that as we look at it, we can't think of any oppositions! We can't think of anything but middle gray. Middle gray cannot suggest any psychological reactions of positive or negative nature, because it is an exact point of neutrality. Middle gray is just a pivot, around which all other values revolve and alternate. All other grays, either lighter or darker than middle gray, are transitional factors, just pathways for whites to travel into the black regions, and blacks to travel into the white regions—but they must always pass through that point of neutrality we know as middle gray.

This may be difficult to follow with words, but suppose we had a gray scale step-wedge on film of the three values, black, middle gray, and white, such as in Figure 7, top. If we made a print from it (see Figure 7, bottom) the

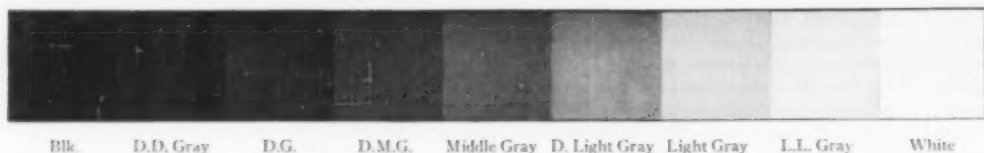
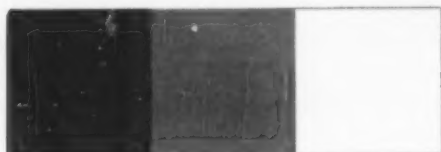


FIGURE 9

thin area would print black. The dense area would print white. The middle gray area would print exactly like itself—middle gray.



B M W
↓ ↓ ↓
W M B

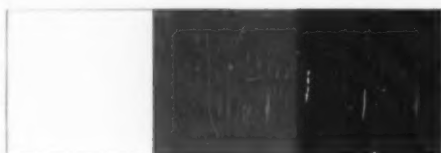


FIGURE 7. Top: Film Step Wedge. Bottom: Print from Film Wedge.

So, theoretically, neutral middle gray is the pivot around which all other values reverse themselves, in relation to their opposites.

Let us suppose that the three key values are three cans of paint. We started with only two, a black and a white, but by mixing equal amounts of each, we filled another can with middle gray. Mixing equal amounts of black and white and middle gray, we achieve another balanced condition. Each time we mix any two together equally, we get a result which is the exact balance of the mixture. Mixing white and middle gray produces another balance. The result is the addition of two more values to the original three key tones, as in Figure 8.

The intervals are black, dark gray, middle gray, light gray and white. This is a five step gray scale as normally



FIGURE 8

designated, but we shall give it a more correct analysis later.

As degrees of "brightness," the scale in Figure 8 is like our rubber ball making five hops, twenty feet apart, down the hill. By selecting any two adjacent values from the above five steps and mixing them together, we get proportionate balanced tones between each value. Such admixtures will produce the following series:

Black + Dark Gray = Dark-Dark Gray
Dark Gray + Middle Gray = Dark-Middle Gray
Middle Gray + Light Gray = Dark-Light Gray
Light Gray + White = Light-Light Gray

and we end up with a scale as in Figure 9.

Notice that as we mixed all values together to achieve more steps, the middle value never changed its position. Notice, also, that as more values were included, we reduced the contrast between each step to an extent, which was an exact balance between any two values. Also notice how each time a new value was included, the extreme opposites of black and white were spread farther apart from each other, thereby reducing visual conflict between themselves.

Theoretically, if the above series were on film in the same relationship of contrast, we could make a print on paper and get a reverse image, except for the middle gray, as in Figure 10. It would remain a middle gray on paper.

The question now is: What has this complete reversal of tone position to do with prints, other than the fact that the same thing happens with an average negative?

It is true that all negatives reverse their tonal values in a print, but rarely with such perfect harmony. In

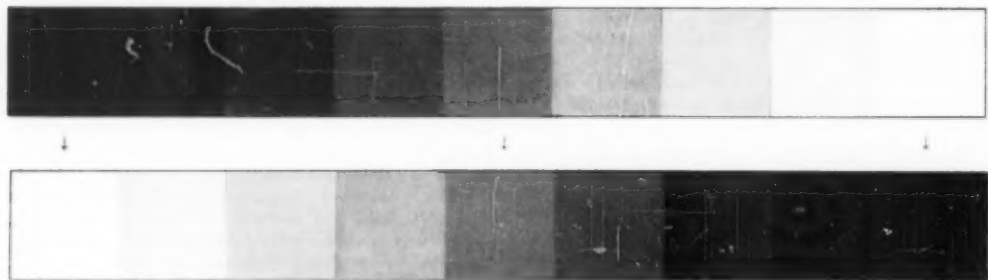
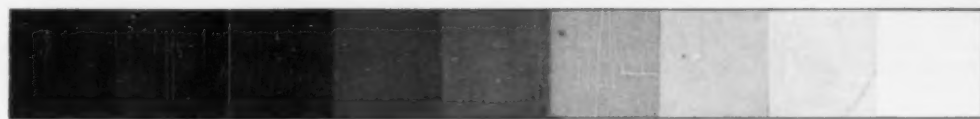


FIGURE 10



0 1 2 3 4 5 6 7 8
FIGURE 11

the gray scale in Figure 10, each value is in a definite relationship with each other value. The relationship is geometric in ratio, or contrast. That ratio of contrast is pitched to only as many definite degrees of tone as will fit the paper characteristics. For that reason, each value will duplicate itself in opposition on paper, and we obtain a true reproduction of the scale. The result is a harmonious range of tone on paper because the range on the film was also harmonious. The harmony is very obvious to the eye, and should also be harmonious to thinking, since it was constructed little by little from admixtures of all values in equal proportion.

Are you as sure of your negatives? Can you tell by looking at a negative whether or not it will print equally well from black to white, with as much harmony as we got from the gray scale example?

Frankly, this is difficult to ascertain, because we are conditioned to pay more attention to the "picture" of the negative than to the blocks of gray deposits that form the picture. We haven't trained ourselves to see the gray scale in our negatives. Just as soon as we can identify the same gray scale characteristics in the negative image that we are familiar with in the scale, then we can find faults and correct them through some means of control.

For the sake of simplicity, let's number the values in the scale in Figure 11, instead of calling them by name.

Here is where we change our classification of the scale.

Counting all values, we have nine steps. Yet we can't think of this scale in nine steps because of the following reasons:

Black and white can be classified as constants. They never change psychologically. Because of its extreme positive reaction of complete saturation, we can call black, ZERO-WHITE. Since white is in direct opposition, we can call white, ZERO-BLACK. So, all we have left are the values that are between black and white; hence they are numbered as to their level of brilliancy. Number one is a low level point of brightness. Number seven is high level brightness. This is now a seven step scale. It shall be our "standard" for further analysis.

Is this scale sufficient for the purpose? Shouldn't we have more values? Seven do not seem to be enough. The fact is that they are more than enough.

The seven step scale can be extended a trifle, but as it is now it packs the best geometric punch a scale can have for the eye without being "contrasty." It has instantaneous eye appeal, and that's what we want.

In the attempt to place a large number of separate values on photographic paper, we shall soon discover that the physical limitations of reflection will allow only a certain number to be easily seen, before the steps get so close together that they are hard to distinguish.

Oh, yes! A large number of values can be placed on

paper, but you must determine not how many you want to see, but how many are necessary to create a "visual wallop" in your prints, without crowding. This demands that the contrast "pitch" between all the separate tones be far enough apart, yet close enough together, so that the eye can identify one gray from the other instantly.

Did you ever make a flat, muddy print? Do you know why that print was muddy? Principally because there were so many slightly contrasted values in, as well as between, the subjects of the picture, that the eye could not distinguish without studying it closely. Any print that requires visual study in order to recognize one subject from another has no "carrying power." Too much contrast creates an opposite reaction of shock, because of too much carrying power.

A happy medium between a "flat effect" and a "contrasty effect" is a series of contrasts that, peculiarly enough, is just within the range of the paper limitations. That totals about fifteen, which could be made from our seven step scale (Figure 11) if we mixed equal amounts of grays from tones #1 and #2, #2 and #3, etc. However, our basic scale is in seven steps, for easier understanding. This is the scale we shall use for negative and print analysis later.

The trick of creating a quality print is to establish a fairly exact contrast between the principal subjects of the scene, so that the eye of the observer can recognize each subject just as easily as he can see the difference between one gray of the scale and another. There is no easy way to measure what this contrast should be, but if each gray has a value about one step greater than the previous one, then it will come very close to creating the best visual attraction which the eye wishes to see. In other words, this means that each step be once again as heavy as the previous step. The seven step scale is such a range of brightness, and well within the range of our sensitive paper emulsions.

Paper Range

Now let's consider paper range.

Suppose we had a square box, into which a number of uniform cubes would fit, completely filling the box. Suppose we had 27 cubes on hand, and our box would hold only nine. Since we can use only the nine, 18 cubes would have to be eliminated. However, we could cut any group of nine cubes into smaller ones, and fill the inside of the box with the resultant 72 smaller cubes. The volume of the box has not changed. We have merely divided the larger and fewer units into a greater number of smaller units.

Our photographic papers are very much like this space inside of the box. The grays of our picture on paper are

(Turn to page 781)

Lens-Aperture Marking Systems*

BY J. L. TUPPER AND C. D. REID

THE ORIGINAL purpose of a diaphragm in a photographic objective was to "stop" the passage of certain undesirable rays which cause distortions of the image. It developed that the diaphragm, by restricting the amount of light passing through the lens, served a second important purpose; that is, it could be made to provide a control of the illumination of the image and, hence, of exposure. The method of designating the diaphragm apertures with numbers which are a convenient and reliable index to the amount of light reaching the image has been the subject of periodic debate among photographers for many years. Recently interest has been revived by the proposal of a new lens-aperture marking system. This is known as the *T*-stop system to distinguish it from the *f*-number system, which is in almost universal use at present.

Before attempting to make an appraisal of the new system, it will be helpful to consider other systems which have been used, in order to learn of the factors which led to the general adoption of the *f*-number system and to the failure of the other systems. By reviewing past experiences an impression can be gained of the confused and unhappy state in which photographers found themselves when several different methods of marking apertures were in use at the same time. This situation could easily arise again.

Background

Prior to the invention of the iris diaphragm, variations in the aperture of the lens stop were accomplished by introducing thin metal plates into the lens system through a slit in the lens tube. In these plates were holes of various sizes which were numbered in a purely arbitrary manner. Hence, considerable uncertainty existed among photographers of that day as to the relation between the number marked on the diaphragm and the amount of light which it admitted to the image plane. In attempting to clarify the matter, M. Carey Lea, writing in Wilson's "Quarter Century in Photography" in 1887, made this suggestion:

"There is no step in photography that could be accomplished with so much facility in proportion to its importance as the one connected with stops. If all makers instead of stamping numbers or other marks on their diaphragms would stamp opposite each opening the relation of its diameter to the focal length of the lens, the advantage would be exceedingly great. The openings would then be marked ' $f/20$,' ' $f/25$,' . . . , indicating that the opening in question was $1/20$, $1/25$. . . of the focal length of the lens or combination. The photographer who uses a number of lenses in place of being obliged to guess at the proper exposure by reflecting over his experience for the particular lens and diaphragm which he is about to employ, would simply need to learn the exposure necessary for a stop of $f/20$, $f/25$. . . for any lens whatever. It is true that the relation of the diameter of the stop to the absolute focal length does not fix the proportion of light admitted with entire accuracy, but it does so sufficiently to answer all practical purposes."

* Communication No. 1357 from the Kodak Research Laboratories. Received March 1950.

Lea was not the first to recognize the value of marking lens apertures in terms of the ratio of the diameter to the focal length of the lens. In 1873, Abbe had suggested a similar method for marking the numerical apertures of microscope objectives. However, within ten years after Lea made this suggestion, the system had become quite generally adopted for the marking of apertures of photographic lenses. At first there was some complaint that the *f*-numbers obtained were too large for convenience and that their being inversely proportional to the square of the light admitted rather than directly proportional was confusing. Numerous attempts were made during the 1890's to modify the formula by which the *f*-numbers were derived to overcome these objections. The Photographic Congress at Brussels in 1890 proposed a system in which the stop, $f/10$, was taken as the starting point and called No. 1. The remaining stops were numbered so that the greater the number of the stop, the longer the exposure time required. These were called the "C. I." numbers. Shortly thereafter, the Photographic Society of Great Britain adopted the Uniform System Numbers, "U. S. N." In this system, the stop, $f/4$, was taken as the starting point and then the stops were numbered as in the C. I. system so that the exposure was proportional to the number of the stop. Zeiss and Dallmeyer used still different numbering systems, but they, too, were derived from the ratio of the diameter of the aperture to the focal length of the lens.

At the Congress of the Photographic Society of Great Britain in 1893, Paul Rudolph, of Jena, presented a paper in which he proposed still another lens-aperture marking system. The response to this proposal was anything but favorable and Chapman Jones, who, with De W. Abney, was one of the leaders of British opinion on photographic matters at that time, took vigorous exception to Rudolph's suggestions. According to the records of the discussion which followed the delivery of this paper, Chapman Jones expressed his inability to conceive of any other unit or starting point on an absolute or theoretical basis than $f/1$. He pointed out that there were already three modified systems "and everybody knows that these three systems are of no use and that there is no unanimity amongst us." "Surely," he said, "it is enough to designate a stop by the proportion which its diameter bears to the focal length of the lens."

In 1898, in his "Treatise on Photographic Optics," R. S. Cole was one of the first to point out a limitation of the *f*-number system which has since proved to be a major factor in the development of the *T*-stop system.

"It is assumed (in the *f*-number system) that the glass of the lens causes no loss of light whether by absorption or reflection, which is by no means the case. It is not often that glass is seriously colored, but in every lens light is lost by reflection and scattering at every surface, and objectives with few surfaces let through more light than do complicated objectives. Hence (the required aperture setting), will depend upon the nature and the construction of the lens."

In spite of this difficulty, Cole offered this comment concerning lens-aperture marking systems:

"Several systems have been proposed, but the one which has been longest established and seems likely to die hard is denoted by the ratio of the focal length of the lens to the diameter of the stop."

The T-Stop Proposal

Only within recent years has the failure of the *f*-number system to take into account differences in the transmittance of lenses become a matter of concern to a sufficient number of photographers to produce an organized demand for a new system. In October 1949, the Lens Calibration Subcommittee of the Standards Committee of the Society of Motion Picture Engineers submitted to the Society a proposal for a standard method of calibrating diaphragm openings for motion-picture lenses in terms of the aperture ratio and the lens transmittance. This proposal is intended specifically for the calibration of motion-picture lenses, and it is implicit in this proposal that each lens be individually calibrated. It is our intention here to discuss the various factors which must be considered in determining the suitability of such a method for more general application. Attention must first be given, however, to the circumstances which prompted the proposal.

The need for a new method of calibrating lenses seemed evident to professional motion-picture photographers when several lenses, generally on a turret and presumably of different focal lengths and construction, were used interchangeably in the course of photographing a single scene sequence. Under these circumstances they experienced difficulty in obtaining negatives matched from the standpoint of the required printer setting. Differences in photographic results obtained with various lenses have been particularly apparent to these photographers because of the exacting requirements of their profession. In this field, serious consideration is given to any improvement in technique or equipment which permits more accurate control of the variables encountered in making motion pictures. The processing of the film is under quantitative control, the amount of light on the scene in the studio is held reasonably constant, and camera speeds are known and controlled with considerable accuracy. The variation in the light-transmitting characteristics of lenses is one of the few factors that has not been under precise control.

Two courses of action might be taken in improving the consistency of the performance of motion-picture lenses. The lenses could be calibrated individually, thus eliminating the errors arising from blanket calibrations. The transmittance of the lens could be measured and incorporated in the aperture marking, so that variations in the light losses in lens systems of different construction could be taken into account. The Lens Calibration Subcommittee recognized the possibility of these two modifications in the method of lens calibration, and in their report they suggested that both be adopted as standard practice in calibrating motion-picture camera lenses and that aperture markings so derived be called "*T*-numbers." The *T*-number has been defined as the *f*-number of an open circular hole or of a fictitious lens having a circular aperture and a transmittance of 100 per cent which

would give the same central image illumination as the actual lens at the specified stop opening (assuming a very distant object). Hence, for a lens with a circular aperture,

$$T\text{-number} = \frac{f\text{-number}}{\sqrt{t}}$$

where *t* is the axial transmittance of the lens.

In appraising the merits of this new proposal, it is necessary to distinguish between its application in professional motion-picture photography and in other fields of photography, both from the standpoint of cost and the technical advantage which it offers. To the motion-picture photographer, the additional cost of the individual calibrations required by this new method probably represents a minor factor. He is normally prepared, at almost any reasonable expense, to adopt any method or technique which will improve the quality or uniformity of his results. The motion-picture photographer normally judges the exactness of match of his negatives by the density at which the face areas are rendered. Since the brightness of the face area falls in the upper range of the brightness scale of the scene, and since it is here that the differences in the transmittance of lenses are most noticeable, he is likely to consider the new method a technical improvement. The next question is whether the modifications incorporated in the new system, which the motion-picture photographer considers an advantage, are likely also to be of similar advantage in general photographic practice. Certainly the greater cost will be seriously objectionable to many amateur photographers.

In order to keep costs within reason, aperture markings on lenses produced in quantity are not engraved individually to match the focal length and diaphragm area of each particular sample. This error in some cases may amount to as much as ± 30 percent. By calibrating lenses individually, this source of uncertainty which accompanies blanket calibration can be reduced to about ± 7 percent. This improvement can be obtained whether the calibrations are in *T*-stops or *f*-numbers and the attendant increase in cost is about the same.

The question of the practical advantage to be gained in modifying the aperture ratio by the transmittance of the lens is considerably more involved. It should be noted that in the definition of the *T*-number no distinction is made between the contributions of image-forming light and flare light to the illumination of the camera image, yet their effects on the characteristics of the image are quite different. This will become more apparent when the effect of flare light on camera exposure is considered. By neglecting this source of error and by assuming that the only light losses in the lens system are those resulting from reflections at the glass-air surfaces, it is possible to compute the transmittance of a lens from data pertaining to the number of glass-air surfaces and their reflectance. Using this value of transmittance, the *T*-number corresponding to any *f*-number can be derived. In Table I, *T*-numbers determined by this means are shown for lenses having different numbers of glass-air surfaces, coated and uncoated. In obtaining these values it has been assumed that the reflectance of an uncoated glass surface is 5 percent and that of a coated surface is 1 percent. It will be seen that the maximum difference in the *T*-numbers when

TABLE I

T-Numbers Obtained When the Aperture Ratio Is $f/8$

| Number of Surfaces | Uncoated Lenses | | Coated Lenses | |
|--------------------|-----------------|-------|-----------------|-------|
| | % Transmittance | T-No. | % Transmittance | T-No. |
| 2 | 90.3 | 8.4 | 98.0 | 8.1* |
| 4 | 81.5 | 8.9 | 96.0 | 8.2 |
| 6 | 73.5 | 9.3 | 94.0 | 8.3 |
| 8 | 66.3 | 9.9 | 92.2 | 8.35 |
| 10 | 59.9 | 10.3 | 90.3 | 8.4 |
| 12 | 54.0 | 10.5 | 88.5 | 8.5 |

the f -number is held constant for all the lenses listed is about 2/3 stop. Even with this unusually large variation in the number of glass-air surfaces, it will be seen that the order of magnitude with which the new aperture-marking system is concerned is appreciably less than one full stop, and that for the lenses normally encountered, i.e., 4, 6, and 8 surfaces, the maximum variation is less than 1/3 stop. The difference between all the coated lenses listed is almost negligible, being about 1/8 stop.

In spite of the fact that the differences in the f -numbers and T -numbers for the lenses normally encountered, whether coated or uncoated, are negligibly small, there would be some justification for modifying the aperture markings in the case of lenses which differ much more widely in transmittance, provided that by so doing more nearly matched results would be obtained. It can be demonstrated that this would not be the case. To do this, it is necessary to consider all the significant factors which determine the amount and distribution of the illumination in camera images and the relationship which this bears to the required camera exposure.

Factors Affecting Camera Image Illumination

The relationship which the illumination * at any point in the camera image bears to the brightness * of the corresponding point in the object depends primarily upon the following factors:

1. The aperture ratio, F/d .
2. The transmittance of the lens.
3. The angle of the image point off-axis.
4. The object-to-camera distance (bellows extension).
5. The amount and distribution of flare light.
6. The brightness scale of the scene, the brightness distribution within the scene, and in the environment of the scene.

It is apparent that the f -number system considers only the first factor, and the T -stop only the first and second. Whether the T -stop, by taking into account two of these factors rather than one, acquires more useful significance than the f -number depends upon the relative magnitude and nature of the effect of the other factors on the illumination of the camera image.

* Because many readers of *PSA JOURNAL* may not be familiar with the new terminology for certain photometric concepts as recommended by the Colorimetry Committee of the Optical Society of America, the terms *illumination* and *brightness* will be used in their older sense. In the new system of nomenclature, the term *illuminance* is used instead of *illumination* in specifying the amount of light incident on a surface; while the term *luminance* is used instead of *brightness*, the latter term being reserved for designating the subjective (psychological) aspect of the sensory or perceptual response of the human observer (see J. Opt. Soc. Am. 34, 245, 1944). The OSA system of nomenclature eliminates many ambiguities which arise from the use of the present practice and should be adopted as rapidly as possible.

Aperture Ratio: The aperture ratio, or f -number, F/d , is a concept developed from geometrical optics and, in theory, it is a measure of the light-gathering power of a perfect lens for an object at infinity. A perfect lens in this sense is one which neither absorbs, reflects, nor scatters light and in the image of which the illumination at any point is independent of its distance from the axis. There is no doubt that the aperture ratio, designated by the f -number, is by far the most important single factor in governing the amount of image-forming light which reaches the camera image. The effect of the other factors compared to the effect of changes in the aperture ratio in most cases is relatively small. In evaluating the aperture ratio for a particular lens, it is normal practice to divide the nominal focal length of the lens by the effective diameter of the diaphragm aperture. The uncertainty in this quantity depends almost entirely upon whether lenses are calibrated individually or assigned a blanket calibration. As stated previously, in the former case the error can probably be as low as 7 percent, while in the latter case it can approach 30 percent.

Lens Transmittance: The magnitude of the differences in the axial transmittance of lenses has already been indicated by the relative values of T -numbers and f -numbers shown in Table I. The facts brought out by these data can be summarized quite simply. At one extreme, the axial transmittance of a single component lens with two glass-air surfaces, coated, is about 98 percent. At the other end of the scale, the axial transmittance of a twelve-surface, uncoated lens is about 54 percent. Thus, if the aperture marking fails to take into account the transmittance of the lens, there may be, in the most extreme case, as much as 44 percent difference in the axial illumination. It should be noted that at the present time substantially all but those lenses used in the relatively simple cameras are surface-treated at the time of manufacture. Surface treatment increases the transmittance of, for example, an eight-surface lens from about 66 percent to 92 percent. By surface treatment, differences in the transmittance of lenses are reduced to about ± 4 percent. Hence, errors from this source introduced by changing from one coated lens to another are very small. While there are still many millions of uncoated lenses in use by amateur photographers, most of the lenses used by professional photographers, particularly cinematographers, have by now been coated.

Off-axis Effects: While the current practice of coating lenses tends to minimize transmittance differences among lenses and brings them closer in this respect to the status of theoretically perfect lenses, there still remains a difference between lenses in the illumination distribution across the image plane. All lenses show a decrease in illumination from center to corner of the image, resulting from the so-called "cos⁴ effect." The amount of this decrease is a function solely of the angle of the image point from the axis. In a typical camera, the decrease in illumination from center to corner from this factor alone is about 35 percent. The distribution of illumination in the image formed by a lens corrected for distortion is somewhat different from that in the image formed by an uncorrected, or poorly corrected, lens. There is another factor which affects the image illumination distribution, in

addition to the \cos^4 effect and which varies with different lenses. This is the vignetting effect of the lens barrel. The variation in illumination across the image plane attributable to this factor can easily be as great as ± 20 percent.

Bellows Extension Factor: The illumination in the camera image depends upon the object-to-camera distance. It is customary to assume that this factor is equal to unity except when the object is closer than eight times the focal length of the lens. At nearer distances, the bellows-extension factor can be obtained from tables provided for this purpose. By assuming that this factor is equal to unity for distances greater than eight times the focal length of the lens, errors as great as 20 percent are introduced into the computed image illumination-subject brightness relation.

The Effect of Flare: The factor which may have a more pronounced influence on the photographic result than any of the other effects is that associated with flare light. Flare is non-image-forming light and for the present purposes can be considered as producing a veil more or less uniformly over the entire image plane. The effect of flare light on the image is to increase the illumination in the shadow regions by a greater factor than in the other regions and so decrease the illumination scale of the image. This light particularly degrades the illumination contrasts in the shadow regions. It does not follow, however, that the presence of uniformly distributed flare light in the camera image is necessarily detrimental to the tone reproduction quality of the final photographic result. It may, in fact, serve to compress the illumination scale of the image of scenes which might otherwise exceed the density scale of the positive material. The amount of flare light and, hence, the magnitude of its effect on the image illumination contrast depend upon the construction and condition of the camera and lens, upon the brightness scale of the scene, and upon the distribution of brightness within and in the environment of the scene. In general, as the transmittance of a lens decreases, because of reflections from the glass-air surfaces, the flare which is made up of this light increases. This direct relationship is usually obscured, however, by the presence of flare light arising from other sources, such as reflections from the interior of the lens mount, shutter, diaphragm blades, internal surfaces of the camera body, the surface of the photographic material, etc. Because the amount of flare in the camera image varies with the brightness composition of the scene, it cannot be predicted or estimated with any certainty.

The unaccounted and unaccountable factor of flare, therefore, prevents there being an exact correspondence between either the T -number or the f -number setting and the image illumination. There are, nevertheless, certain generalizations which can be made. When the illumination in the image is produced primarily by image-forming light as in the highlight regions, differences in the transmittance of lenses become apparent. When the illumination is supplied primarily by flare light, as in the shadow areas, differences in the transmittance of lenses are obscured. It may be assumed, then, that when two lenses of widely different design are used at equal T -numbers to record the same scene, the illumination in the highlight

regions will differ by only a small factor. On the other hand, the illumination in the shadow portions of the image formed by one lens may be twice as great as in the image formed by the other. If the lenses were set at equal f -numbers, the illumination in the shadow areas would differ by a smaller factor. The reason for this is that flare arising in the lens system is greatest when the transmittance is lowest (provided the low transmittance is the result of light losses by reflection and not by absorption in the glass) and it is sufficient to compensate approximately for the loss of image-forming light in the shadow regions. What this generalization means in terms of camera exposure depends upon the characteristics of the photographic process used, the nature and magnitude of the other variables present, and the circumstances under which comparative exposures are made.

Factors in Camera Exposure

It is important to recognize that there are two distinctly different circumstances under which lens-aperture marking systems can be put to test in practice. Furthermore, each represents a valid basis for judging the effectiveness of the system in providing indices for the setting of lens apertures to obtain correct camera exposure. The first of these circumstances involves direct comparison and is normally encountered only when lenses are used interchangeably in the course of photographing a single scene, as in professional motion-picture photography, where several lenses on a turret may be used in succession on the same subject. This represents the most critical test condition, since differences in results are attributed directly to the performance of the lenses, provided there is not an appreciable difference in their fields of view, or, if so, that the brightness scale and brightness distribution in the scene areas viewed are not appreciably different. The second method of comparison is indirect and is the type that is usually made in normal photographic practice. Here a comparison of lens performance is based on the yield of satisfactorily exposed results, using a wide variety of scenes photographed with different lenses, probably in different cameras, at various times but seldom simultaneously. It is by such comparisons that the average photographer will judge whether he has benefited from greater precision in the marking of his lens apertures.

Direct Comparison: In direct comparison, differences in the photographic results obtained with two or more lenses set at the same aperture marking are apt to be interpreted as a failure of the marking system. Since in a direct comparison the scene, the shutter, the camera, the film and its after-treatment are assumed to be constant, only those factors which are a function of lens design, lens-mounting construction, and aperture calibration are operative. While some of these factors can be taken into account in the aperture marking, there are others which cannot be incorporated in the marking but which may have a more profound effect on the final results. These may be summarized as follows:

1. Lens transmittance.
2. Precision of aperture calibration.
3. Barrel vignetting.
4. Lens flare.

It has already been pointed out that variations in any of these factors affect the point-to-point relationship between subject brightness and image illumination. Differences between lenses introduced by the first factor are minimized by the *T*-stop system. Individual calibration of lenses, which is implicit in the *T*-stop proposal, reduces differences attributable to the second factor. However, this would be equally true if lenses were individually calibrated in *f*-stops. When the results obtained with different lenses are compared primarily on the basis of the reproduction of areas in the upper range of scene brightnesses, where the contribution of flare light to the total image illumination is small, lenses calibrated in *T*-stops may appear to yield somewhat more uniform results than those calibrated in *f*-numbers. This type of comparison is usually involved in professional motion-picture photography and in all phases of photography employing reversal processes. Even here, however, if the lenses are coated and have individually calibrated *f*-stops, any lack of uniformity in results will be very small.

When conventional negative-positive processes are employed, the failure of the *T*-stop system to take into account the flare-producing characteristics of lenses works to its disadvantage. In this application, the *f*-number can be expected to be a better index to camera exposure than the *T*-number. This is because the minimum camera exposure required of negative materials is related to the illumination in the shadow region of the image. As previously stated, flare increases shadow illumination by a greater factor than highlight illumination, thereby tending to compensate for the loss of the image-forming light in lenses of low transmittance. Thus, for the average scene, the illumination in the shadow portions of the images formed by different lenses set at equal *f*-numbers tends to be equal, regardless of the transmittance of the lenses. At equal *T*-number settings, the lens of highest transmittance will produce the lowest shadow illumination. This is because the *T*-number neglects flare and changes the aperture ratio to compensate for the difference in transmittance.

Indirect Comparison: It is very unlikely that circumstances will normally be such that critical direct comparisons can be made. It is more likely that the average photographer will be forced to appraise the merits of the lens-aperture marking system on the basis of a comparison of the average photographic results obtained with lenses calibrated by different methods. This method of comparison evaluates the merits of lens-aperture marking systems essentially on the basis of correct camera exposure. To establish the correct camera exposure with precision, the following information is required:

1. The point-to-point relationship between subject brightness and camera image illumination.
2. The brightness and brightness scale of the scene.
3. The camera shutter time.
4. The sensitivity of the photographic material.

It will be recognized that only in the first item does the lens-aperture marking enter the problem. This, in relation to the other factors involved in establishing the subject-brightness, image-illumination relationship, has

been discussed previously in the section dealing with *Direct Comparison*. Our interest here is in pointing out the order of magnitude of some of the uncertainties introduced in the computation of correct camera exposure by the factors included in the remaining three items. The important fact which should be brought out here is that for the average photographer, as distinct from the professional cinematographer, no precise information is normally available on these items. The best values which can be supplied are based on average characteristics. To obtain a complete appreciation of the ramifications of this problem and of the factors which contribute to the uncertainties in the computation of correct camera exposure, it is important to consider each of these items in greater detail.

Brightness and brightness scale. On account of the differences in the maximum and minimum brightness of various scenes, as related to the average brightness or the incident illumination, the average photographer using an exposure guide or an exposure meter in the usual way will find a variation of about ± 50 percent in the exposure indicated, relative to the optimum exposure which will be found by trial.

Shutter time. The differences between the nominal shutter times and the effective shutter times of commercially available shutters may be considerable, depending upon the type of shutter, its mechanical condition, the shutter speed, and the ambient temperature. It is a fair estimate that the order of uncertainty associated with this factor is often as great as ± 25 percent, without taking any account of the relatively large changes in shutter efficiency with lens opening.

Film sensitivity. The effective sensitivity of any given brand of film may be appreciably different from that indicated by the exposure index value supplied by the manufacturer. Aside from the normal batch-to-batch variations, sensitivity will vary with the age of the film, the conditions of storage, the length of the interval between exposure and development, the type of development, etc. The uncertainty associated with this factor is of the order of ± 50 percent.

It should now be clear that especially in cases when these errors are all in one direction, the sum will be so large that the relatively small differences between the *T*-stop and *f*-stop are not of much consequence.

Conclusions

In recent years, the *f*-number system has been criticized in the technical photographic literature because it is based purely on geometric considerations and does not take into account the light losses in the lens system. On the basis of the suggestions which have been offered for improving the *f*-number system, a new method for calibrating and marking lens apertures known as the *T*-stop system has recently been proposed by the Lens Calibration Subcommittee of the Standards Committee of the Society of Motion Picture Engineers. It has been suggested in a section of the photographic press that this system is a vast and useful improvement over the *f*-number system. However, when all the factors which determine the usefulness of a lens-aperture marking system are examined, it is found that this statement can be justified only when it is confined to the highly specialized field of professional

motion-picture photography. Even here, however, there is no assurance that matched photographic results will be obtained with identical *T*-number settings on different lenses, unless the lenses are also identical in their flare-producing characteristics, in the distribution of illumination in their off-axis points, and in their field of view.

In the more general applications of photography, where other factors than those associated with the lens characteristics are involved, regardless of what can be done in the way of improving the lens-aperture marking system, there still remains the probability that a calculated camera exposure may differ by more than a factor of two from the camera exposure which is required to produce a specified level of photographic quality. That this does not represent a serious photographic problem can be attributed to the adequate exposure latitude of most photographic materials, plus the fact that the photographer normally makes certain required adjustments in the aperture setting to compensate for systematic errors which have been found through trial.

By taking lens transmittance into account in calibrating lens apertures instead of deriving the aperture marking from geometrical considerations only, a source of uncertainty which may be of the order of ± 20 percent is largely eliminated. However, when only coated lenses are considered, this uncertainty is only about ± 5 percent. Thus, it becomes apparent that with the increased use of coated lenses by perhaps the most critical photographers, the need for a means of discriminating between lenses differing widely in transmittance is disappearing.

By calibrating lenses individually, whether in *T*-stops or in *f*-numbers, the source of uncertainty which accompanies blanket calibration can be reduced from about ± 25 percent to less than ± 7 percent. Much of the improved accuracy of the lens markings claimed for the *T*-stop method comes from the specification, implicit in this method, that lenses be calibrated individually. This, of course, is not an attribute of the *T*-stop method of calibration but rather a refinement which could equally well be applied to the *f*-number system (with a similar additional expense, of course).

The errors in the computation of camera exposure resulting from uncertainties introduced by the variables of *f*-number calibration and lens transmittance are systematic and may be compensated for by a fixed adjustment in aperture setting based on the results of trial exposure. This is conventional practice among photographers. For this reason, the proposal for an improved lens-aperture marking system is of minor importance for most photographic applications. It is the random variations of greater magnitude, such as those introduced by variables in subject-brightness scale and film sensitivity that are effective in causing fluctuations in photographic results which cannot be predicted or controlled, that are of more real concern to the average photographer.

Although it is primarily on the basis of their significance in the computation of camera exposure that the *f*-number and *T*-number systems have been compared, consideration should also be given to the fact that certain of the image-forming characteristics of lenses are a function of the lens aperture. The hyperfocal distance, the depth of field, and to a certain extent the limit of the

resolving power of a lens depend upon the size of the entrance pupil and the focal length, which are purely geometrical considerations. The *f*-number is, therefore, more directly indicative of the performance of a lens in this respect than the *T*-number.

Through many years of use, the *f*-number system of aperture marking has become well established in every phase of photography, and its limitations are well recognized. Any other system of aperture marking, to be acceptable as a replacement for the *f*-number system, should offer sufficient advantage to justify the added expense as well as confusion which most certainly will attend its introduction. Because of the small and uncertain advantage which the new system offers to the great majority of photographers, it seems unwise to complicate matters by the introduction of another lens-marking system to the general photographic public.

TEN PICTURES (From page 703)

or sit in the balcony at Carnegie Hall—and each time learn something else about music.

In my unusual capacity of a sort of reviewer of a book that I designed, I wish to add some other comments about "Yachtsman's Camera." The first chapter in the book is called "A Camera Primer," and it is for beginners who wish to take their picture-taking seriously, simplify the mechanical problems, and attain mastery of the camera so that they can concern themselves with the pictures. I sometimes think that such beginners are closest kin to experts. Similarly, a unique feature of this book of primarily outdoor photography is a striking 18-page section on technical devices. This is in the form of double captions for every photograph. One caption describes the action, adding to the insight of the cameraman who believes in knowing why a given moment is the right one. The other caption is purely photographic, with exposure and filter and lighting data.

The book is one of the Van Nostrand Sporting Books, is 7x8 inches in page size, 148 pages, and is priced at \$5.00. It may be purchased from PSA JOURNAL.

JOHN R. WHITING, APSA

GRAY SCALE (From page 775)

like the limited number of cubes we could put into the box.

The negative that made that print is the total number of cubes we have on hand. We can use any group of grays from our negative, but only as many will record on paper as that paper will hold. We can divide that limited number of grays into smaller units to increase their number, but each gray contrast unit will be smaller, just as each cube unit was smaller.

The art of printing is the ability to regulate and organize the contrasts of the subject images of the negative to a limited number, so that they occupy only as much "space" as the range of the paper will allow.

(EDITOR'S NOTE—Part II of this article will appear in the January 1951 PSA JOURNAL and Part III in February. The author will show how the gray scale may be adapted to negative analysis and how print quality may thereby be improved.)

"How To"

No. 12—CONTROL CONTRAST IN NEGATIVES AND PRINTS. PART I—NEGATIVES

JOHNNY APPLESEED, APSA

AMATEURS and professionals alike have trouble controlling photographic contrast and will continue with their troubles until they understand the factors that determine contrast. Not until then will they stop floundering around, hunting for papers which will fit their varying negatives rather than making negatives to match a pre-chosen paper.

Rule number 1 in every good photographer's book is: *Never leave for a later step that which can be done in an early one.* Think through your whole picture before you start. You are on the scene; you know that when subsequently making the print you should use normal paper (Grade Number 2 or equivalent). Here is a common way to control contrast at an early step in outdoor picture making.

Examine the brightness range of the scene. That is, determine the difference in brilliance between the brightest highlight and deepest shadow. This brightness range will determine your film exposure and development. For instance, if the brightness range is about 25 percent higher than normal you will need to compress the contrast in your negative. To do this the film should be exposed to give detail in the shadows, usually about one stop more than the exposure indicated by a meter. Develop this film about two-thirds your normal development time. Scenes with dark objects and water reflecting bright sunlight are typical of high brightness range.

If the brightness range is lower than normal, you will need to expand the contrast in your negative. To do this, under-expose the film by about one stop and develop the negative about 1½ times your normal time.

This straight forward approach will eliminate the need for trick manipulations during printing or at some late stage in the picture-making process.

However, where additional adjustments are necessary contrast can be regulated in still more ways. You can adjust film contrast by the techniques given below.

To reduce film contrast

- a. *Overexposure and underdevelop*, as discussed above.
- b. *Infrequent agitation*. Be sure to agitate enough to prevent streaks. A little experience will tell you the minimum for your equipment.
- c. *Used developer* gives less contrast for a given development time than fresh developer. Effective film speed may also be reduced. For low contrast use all-elon developers.
- d. *Use diluted developer*.

e. *Decrease development time*. See the introductory paragraphs of this column.

f. *Decrease development temperature*. Operation at about 65° F., compared with the normal 68–70° F., will reduce contrast and speed if normal time is used.

g. *Film choice*. See discussion under (1) below.

h. *Lenses without coatings* are likely to give less contrast than coated lenses. This is attributed to scattering of light by uncoated lenses.

i. *Certain reducers decrease contrast*. This will be discussed in a later column.

To increase film contrast

a. *Underexpose and overdevelop* as discussed above.

b. *Frequent agitation during film development*. Two to three times normal agitation will produce noticeable results.

c. *Fresh developer* gives higher contrast than partially spent developer.

d. *High temperature* increases rate of development and therefore enhances contrast for a given time compared with normal temperatures. Temperatures should not exceed 75–78° F.

e. *Increased development time* has the same effect on contrast as increased temperature.

f. *Choice of film*. See the discussion under (1) below.

g. *Use of filters*. Certain filters increase contrast. This will be the subject of a later column.

h. *Chemical intensification* provides a means for appreciable contrast increase. This technique will be discussed in an early column.

i. *Use of coated lenses*. Coating reduces flare of light inside the camera and between the lens parts. It puts the light where it belongs and so tends to give greater density differences between highlights and shadows than with most uncoated lenses.

j. *Chemical reduction* of negatives can give a contrast increase as seen in the print. This will be discussed in an early column.

Some of the major factors which contribute to film contrast as seen in the print are:

1. Inherent Film Contrast

Not all films give the same contrast at the same development time. Generally speaking, the finer grain films show more contrast under comparable handling

conditions than do the medium and coarse grained films. For example, the inherent contrast of Super-XX is slightly but noticeably higher than the contrast of Tri-X.

The modern trend to use the combination of fine grain film, cameras producing small negatives, coated lenses, fine grain developers, and enlargers with condensers has led many amateurs to high contrast. If your technique requires fine grain film and if you get too much contrast, you will need to use some of the techniques mentioned above for reducing contrast.

Most films lose contrast as they age. The magnitude of loss is sufficient to produce what would be considered a flat negative by comparison with the same scene photographed on fresh film. This contrast loss can be compensated for by slight overdevelopment. Undeveloped images lose contrast if a month or more elapses between exposure and development. The rate of deterioration increases with temperature. To realize full contrast, negatives should be developed soon after exposure.

2. Degree of Development and Type of Developer

As development progresses, most films continue to build up contrast. The increase is rapid at first and then tends to slow down in the later stages. The rate of increase with time is still high when the average negative is ready for removal from the developer, therefore, it is important to control the degree of development not only from the density standpoint but also to get the contrast wanted. Appraisal of the image during development is an important matter wherever critical work must be done. Inspection development (see column No. 4 in the April 1950 PSA JOURNAL) affords the best method for following the progress of development. Manufacturers' recommendations are for average scenes and average equipment. If you want optimum results under your particular conditions, you may have to depart from recommendations at times.

Some developers, when used as recommended, give quite different contrasts from others. For example, D-8 or D-11 will produce much more contrasty negatives than D-76 or Finex at recommended times.

3. Color Contrast

The amount of light striking the film determines the film density resulting upon development. From experience it is apparent that a white object will give high negative density while a black object will give low density due to differences in light-reflecting powers. The individual colors fall between white and black in their abilities to reflect light, and in photography with panchromatic films contribute negative densities in proportion to their abilities to reflect light.

The color of subject matter can be a large factor in negative contrast as seen in a print. The farther two colors are removed from each other in reflecting power as "seen" by the film, the greater the apparent picture contrast when the colors are transposed into the monochromatic tones of black and white photography. What makes the whole matter of color hard to evaluate visually in terms of print contrast is the difference between eye sensitivity and film sensitivity. To see the colors the

way the film "sees" them, use one of the viewing filters available in camera stores.

Knowledge of reflecting powers can be put to good use to focus attention on the motif or center of interest of your pictures. By choosing a motif of high reflectance color (say, lemon yellow) and surrounding it with objects of lower reflectance (say, dark green), the high reflectance object can be made to stand out in the print.

Such generalizations apply to panchromatic films but not fully to films of other sensitizing.

How do you control negative contrast? Send your comments to me at PSA Headquarters, 2005 Walnut Street, Philadelphia 3, Pennsylvania. Best letters will be printed as space permits.

Next month: How to Control Contrast in Negatives and Prints—Part 2—Prints.

* * * * *

East Orange, New Jersey

DEAR JOHNNY:

Recently I have taken quite a number of portraits, mostly of women and children. These portraits were taken on orthochromatic sheet film for the reason that I am of the "old school" and develop by inspection. However, I find that the faces and other exposed flesh of the subjects, such as the hands and knees, print too dark as compared to the rest of the figure, and to obtain a balanced print, it is necessary to dodge these parts in projection. It is not feasible to use make-up on these subjects.

I know, of course, in a general way, that orthochromatic film is insensitive to red and that the human skin contains a considerable amount of this pigment. But, "what to do about it" is the problem that I hope you will help me solve.

Undoubtedly I "slipped up" some place. Under the circumstances, would a filter help? If so, what color and what depth of color? Could it have been the soup I used, since I compound my own? But, then, I've used commercial developers with no better results.

I assure you that a few lines from you will be appreciated.

G. N. GARRISON

DEAR MR. GARRISON:

Your letter of September 29 had to await reply until I returned from the PSA Convention. Of course, my trip was made rather slowly as you may have guessed when you saw my picture on page 366 of the July PSA JOURNAL.

It is my hunch that your trouble lies in the fact that you are lighting portraits as for panchromatic but using orthochromatic film. Since orthochromatic emulsions usually give lower negative density than panchromatic emulsions with the same portrait subject, fuller exposure can and should be given to orthochromatic films than to panchromatic in portraiture.

Could it be that you are underexposing the hands and the skin other than the face? I suggest that you try giving these other areas a little more light.

I don't see how a filter will help.

JOHNNY APPLESEED, APSA

* * * * *

Urgent requests for further information on B-C flash have been received from several members. Our column on this subject will be printed in about 6 months. In the meantime, if you want additional information I suggest you write to:

National Carbon Division
Union Carbide and Carbon Corporation
30 East 42nd Street
New York 17, New York

Ask for Bulletin #5.

Views and Reviews

By THE EDITOR

Baltimore is now history, and as I think back on the happenings at the Convention, the friendly and stimulating people I met there, and the excellent programs I heard, I know I could not have spent my time in any better way.

One of the most interesting facets of the Convention was its international flavor—PSA personalities from England, France, Mexico, Canada, and even all the way from New Zealand.

Of the foreign photographers attending the Baltimore Convention, one came halfway around the world to be with us. In fact, Fred L. Bowron of Christchurch, New Zealand, wasn't even a member of PSA when he left his homeland in the middle of July. In Hawaii, his first contact with the United States, a group of PSA members there presented Fred with his PSA membership card and pin.

Through other contacts in Vancouver, Quebec, Montreal, Milwaukee, Boston, New York and Philadelphia, he was sold on the idea of attending the Convention in Baltimore. We picture him looking over one of the portfolios in PD headquarters.

Fred is Vice-President of the Christchurch Photographic Society, and acted as the New Zealand representative at the Convention. He promised to take back to PSA members there a complete report of the people and events in Baltimore. In fact, he had so much fun at his first PSA Convention that he paid six years dues in advance, just in case dollars get scarce in New Zealand. We also understand that several more New Zealand photographers are hoping to join with us in PSA just as soon as dollars become more available.

The largest delegation from a "foreign country" were the nine photographers from Canada, officially led by Rex Frost.

Manuel Ampudia, president of the Club Fotografico de Mexico, led a group of four members of his club (representing all the officers). They brought with them pictures of their beautiful new club rooms. While here, a new international portfolio was organized, the First Mexican-American. Mr. Ampudia had hoped to start this activity, and had secured the ten Mexican members before he came to the Convention. But the American group was on its toes, and the First Mexican-American Portfolio was completed at the Convention. (If you are interested in joining such a group, see the story under "International Portfolios" in this issue.) No doubt additional portfolios will soon be under way. It was also interesting to note that the American vocabulary of our visitors increased amazingly during the Convention.

I should also mention Maurice Tabard of Paris, France, who gave two interesting and inspiring talks during the Convention (and about whom I will have more to say next month); Angel de Moya of Havana, Cuba who "sold" subscriptions to the lovely magazine, "Chinese Photography"; and D. A. Spencer of London, England, who spoke at the banquet giving us a picture of the difficulties under which our foreign friends work. It was truly an international gathering.

Of course, everyone had an enjoyable time on the boat trip. Not only was there a terrific amount of food consumed, but there were also a terrific number of pictures taken. In fact, those who didn't get there enjoyed the antics of those who did when the Photo-Journalism Division presented a movie of the activities aboard the boat at the banquet.

Our sincere congratulations to those members of the PD who received honors at the banquet; and special congratulations to John R. Hogan and Burton D. Holley, both past Chairmen of the Pictorial Division, who received the award of Honorary Member.

There were so many interesting and challenging happenings at the Baltimore Convention—if you went, you know what a great time we all had. If you didn't go—you are the loser, and you'd better plan now to be with us in Detroit next year. You'll never regret it.

What's In A Name?

This is the last call. Have you submitted your suggestions for a new name for the Pictorial Division's monthly news outlet, now known as "The Folio"? If not, better get your thinking cap on now and submit your suggestion. We have already received quite a few, but the competition is still open, and you may win.

The new name should be indicative of

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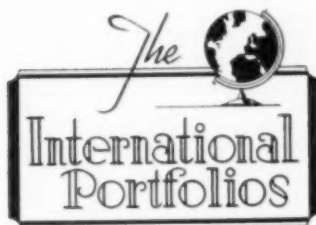
ORGANIZATION

John R. Hogan, Hon. PSA, FPSA, Director
1528 Walnut Street, Philadelphia 2, Penna.



Left to right: Jane Shaffer, APSA, Director, International Portfolios; Eldridge Christluff, Hon. PSA, Director, American Portfolios; Fred Bowron of Christchurch, New Zealand; Ray Meiss, APSA, Vice-Chairman of the Pictorial Division; and W. E. "Gene" Chase, APSA, Chairman of the Pictorial Division, in the Portfolio Room at the Baltimore Convention.

the fact that this column is the news outlet for the wide variety of services offered by the Pictorial Division to its individual and club members. You need not write anything fancy, just send a postal card to Stella Jenks, Editor, 1846 Kenny Road, Columbus 12, Ohio, saying, "My suggestion for a name to replace 'The Folio' is . . ." Be sure you sign your own name and address as the winner will receive one year's dues in the Pictorial Division and the PSA.



DR. WILLIAM F. SMALL, Associate Editor

The magic of lens and silver salts is often thought to be a technical one but not so with the International Portfolios. Here that magic sweeps over barriers of international boundaries and language gaps to form lasting friendships, broaden concepts of pictorial approach and widen technical knowledge through exchange of information as well as increase international understanding and interest.

A photographer who has developed his skill to the point where he is capable of making salon prints is ready for the International Portfolios, whether he submits to salons or not. Unchallenged skill is like an under-exposed print, dull and uninteresting even to the owner. Properly exposed to friendly comment, a full scale of values in

fun, friendship and skill is developed. The International Portfolios give this exposure.

Portfolios are composed of groups of twenty photographers, ten from each of the two participating countries, who exchange prints for comment with one another in the general style of a round robin.

A portfolio, when complete, consists of (1) a "Collecting Section" where the member places a new print each time the portfolio reaches him, (2) a "Commenting Section" of foreign prints on which the member writes his comment, (3) a "Reviewing Section" of American prints being circulated so that all members may see the comments made by their counterparts in the other country, (4) a "Removal Section" from which each member will remove his print, and (5) the Notebook where a round robin letter runs continuously. This Notebook has grown until it is of equal interest to the prints in many cases, and it is here that discussions on techniques, equipment, art, gardens, the high cost of baby sitters, etc., wax long and friendships are brought close and firmly cemented.

There are portfolios with 16 different countries from which a PD member may make his selection when joining. Each is under the directorship of a general secretary who makes membership arrangements, routes the portfolio among its members on circuit, ships and receives it from the other country, where necessary translates the comments and Notebook, and pesters the member who carelessly keeps the portfolio too long. Where there is more than one group or circle exchanging with the same country as in England, France, and some others, a circle secretary assists the general secretary with the handling. Many of those joining one portfolio soon apply for membership in others also—it is so much fun.

To get this full value of fun and fellowship, send your name, address and a comment on your photographic background to the Director of the International Portfolios, Miss Jane J. Shaffer, APSA.



EVELYN M. ROBBINS, Associate Editor

Here's wishing each and every one of you a 1951 of health, happiness, prosperity and good shooting! May your pictures be the best you've ever taken, and turn out to be "just the way you wanted them."

Let's make a few resolutions, too, for the New Year—now's the time to do it. First, let's resolve to always have a print ready when the portfolio arrives. Second, let's resolve to make that print the best possible print that we can produce. Third, to keep the portfolios rolling on time. Fourth, and far from least, to keep the records up to date so that all portfolios will be properly addressed, thereby causing no delays in delivery.

You know, it is a very good idea to make a print weeks ahead of the delivery date—it after looking at it for a time, it doesn't satisfy you, you will still have time to remake it. You will also have plenty of time for those important jobs of spotting, etc. This will help us to keep the first three resolutions—and five minutes to address a card will help to keep the fourth.

Let's make the year 1951 the biggest and best year yet for photography and the immeasurable pleasure it gives to all of us!

"Star Dust"

A monthly column devoted to the "Wit and Wisdom" of the Stars as taken from the Notebooks in the Star Exhibitor Portfolios.

By ROY E. LINDAHL *

Last month's remarks by A. Aubrey Bodine brought forth some very interesting comments by two other members of the group. P. H. Oelman, FPSA, is inclined to take his remarks rather lightly as he writes:

The first time I read Aubrey's comments in the Notebook I thought he was kidding, and I am still not sure that he was serious. How anyone who consistently hangs four and can top the list anytime he wants to can say that he can't understand saloon juries is beyond me.

Seriously, Aubrey, are you kidding? I don't believe you really mean that a print is pictorial just because it was hard to take. Aren't you getting your press and pictorial viewpoint a little confused? If "Ocean Ballet" deserved to hang at Pittsburgh because you stood in the briny deep up to your a-- (I was about to say "armpits," but seeing that you used a Graflex, I guess I'd better say up to your camera level), then the finest pictorial shot I have ever seen was one a pressman got of a suicide passing the fifth floor on his way to eternity, after jumping from the 15th. That press guy did not know when the fool was going to jump! There I think you had it on him. Furthermore, according to Newton's law of gravity, the suicide was moving a lot faster than your ballerina. As I see it, you got a marvelous

* Gen. Sec., PSA Star Exhibitor Portfolios.

shot of a grande jete at precisely the correct moment, so far as the dancer was concerned and for that you deserve high praise and congratulations. Unfortunately, at the same precise instant, she was completely suspended on the horizon because of the perfect merger of the horizon with the right leg. Furthermore, the drapey across the left thigh tried its very best, but just missed nailing the front of her to the same line. This fault is serious enough to justify pictorial (not press) juries tossing it out, particularly when you remember that they did not see, much less feel, the surging ocean trying to knock your underpins from you while the picture was being made. At any rate, I have seen at least fifty of your prints which were head and shoulders above this one, so you can't weep on my shoulder.

John R. Hogan, FPSA, says:

I believe with P. H. that Aubrey is doing a little kidding. All he can do after all that struggle is finish at or near the top of the list year after year since before most of us were born.

There are two kinds of people who roast the salons: those who can't make salon pictures at all and those who can finish near the top no matter what the rules—the former are dead serious and the latter are spoofing. The people who can't make a salon print because their stuff is nothing but blown-up snapshots finally try in desperation to be "different." They send in prints that are just a miscellaneous lot of unrelated junk thrown together on a table with a lot of shadows thrown in for good measure, or trick stuff like solarization or reticulation, which certainly looks different but hardly good, or they scramble up several negatives or print them all together and call it "montage" or mix up strong textures with their photographs.

Finally the judges will hang one just to prove that they understand it, and what happens? The maker of the print, if one of those who can't make good pictures, will hawl them out for not hanging his other there, and if a good photographer, laughs up his sleeve for putting one over on the judges.

Sure, I've done it. I made one a few years ago that didn't mean a thing, gave it a title that meant still less, and hung it three times just to prove what I have just said. I put it in a club show where an artist critic raved about it, gave it first prize, and found a lot of things in it I never knew were there. In artist's double-talk nobody could understand. Nuts!

A short time ago Jane Edwards, after taking the course at the Chicago School of Design, made a picture of a garbage can, lifting it in a salon, and has been laughing ever since, particularly at the critics who said she couldn't hang it. It was different, sure, maybe it even had social significance, but the real reason she made it was to prove that the salon judges are not too smart.

Next month: John has more to say about this subject.

Random Thoughts

By E. R. CHRISTIE, Hon PSA, APSA

New Year—that is the time for resolutions. There are a number of resolutions that portfolio members could and should make. They are resolutions that will make you, your Portfolio Circle Secretary and your Director happy. The most important resolution is the one to get the portfolio under way within the allotted five days. Another is the resolution to send in the arrival card as soon as the portfolio has been received and the transmittal card as soon as it has been shipped.

Another resolution that will make everyone happy is to promptly advise Philadelphia, your Circle Secretary and the Director of American Portfolios promptly of any change of address. Advise all three, not just Philadelphia. Still another resolution is to advise your Circle Secretary when you plan on being away from home for an extended period at a time that a portfolio



NIPPY

Catherine R. Congdon

is due to reach you. This will enable you to be by-passed and to receive the portfolio later, rather than to have it bog down until your return. Another excellent resolution is to read "The Folio" for important information is being brought to you from time to time through its columns. If you will make and keep these resolutions then 1951 will be a happy year for everyone connected with the portfolios.

Of course, there are other resolutions that you can make also that will help a lot. When you have shipped the portfolio along to the next member why not resolve then and there to start on your new print for the next circuit immediately? If you do that you will have a print that you can justly be proud of by the time the portfolio reaches you instead of writing in the Notebook—"the portfolio caught me with my prints down." Following this plan, you will have five months to make and re-make your print. Try this idea and you will never again be caught. Another resolution, and it is being done by many, is to place a contact print of your portfolio print on the inside cover of the print folder. Thus your fellow members and your Commentator can better judge and criticize your print—also pass suggestions as to cropping that may not have occurred to you.

Another resolution that you can make is to give the other fellow a break. While the portfolio is with you, turn to the folders containing your prints or print and place your name, address and print title on each of the comment sheets and the Commentators Sheet in the folder. If you will do this it will only take a few moments and will save someone else from having to do it for you later on. We have been requesting this for sometime in the Portfolio Notebooks but still there are members who fail to do this.

The Express Situation

In our "Random Thoughts" in the November "Folio" we told of troubles that had developed in regard to losses in express shipments. These losses continued until we arbitrarily held up shipment of all

portfolios out of Evanston until such time as Railway Express could come up with a solution to the problem.

The solution, we are glad to advise, has now been found, and if each member will carry out the following suggestions, we should have no further losses in transit. In shipping the portfolio request that it be shipped "sealed." Sealing is accomplished by the use of the Railway Express Griplock Seal which carries a serial number which also appears on the manifest. This seal is a small metal fastener which is placed on the portfolio. If opened, the seal breaks apart and cannot be placed back on the case. We have found by experimenting that the only safe way to use the seal is to tie a strong piece of twine vertically around the portfolio in such a way that the seal comes in the space between the two handle fasteners. This way the twine cannot be slipped from the case. After tying in a hard knot about six inches of twine should be left so that the Griplock Seal can be placed on the end of the twine and fastened close to the knot. We are doing this on all portfolios being shipped out of Evanston and all losses have now stopped.

You may run into employees who will now want to cooperate in this but insist on the seal. You may find some who will want—without any authority whatsoever—to inspect contents of the case. If you do, advise them that they have no authority to inspect contents. Also advise that the seals are being used at the suggestion of the Railway Express Agency in Chicago to prevent losses by tampering while portfolios are in transit. If you run into trouble on this, hold the portfolio and let me know at once and I will mail a seal to you.

Do not attempt to use the seal on the buckle or strap of the portfolio as we have found that used in that location the portfolio can be opened without disturbing the seal. The only way the seal can be safely used is as outlined above, by tying a strong piece of twine around the case vertically so that it cannot be slipped off the case.

If each portfolio member will carry out these suggestions and will insist on the portfolio being sealed, then we will have no further cases of loss while in transit.

The Portfolio Medal Award

Once more we go to the West Coast for our Portfolio Medal Award winner. This time, congratulations to Catherine R. Congdon, of Napa, California. Catherine is one of our portfolio pioneers having first joined a circle in February 1946. Catherine's photographic work is done under difficulties and a constantly shifting scene as you will recall from her article which appeared in the JOURNAL several years ago.

Catherine's medal-winning print, "Nippy," had travelled in Portfolio No. 19 in 1947. It was accepted and hung in the Philadelphia International Salon in February, 1950. Catherine's story of the picture and its acceptance follows:

The original print appeared in Circle No. 19, Circuit No. 4 and was inserted in the portfolio on June 4, 1947. It was first sent out and hung in the Philadelphia International Salon in March

1950. Previous to this it had achieved some local success—first place, Class B, Silverado CC, Napa, California in September 1949; third place, amateur division, Northern California CC's in October 1949; first place Tri-County in November 1949. It was this and its favorable reception in the portfolio three years previously that caused me to send it to the Philadelphia Salon. Naturally the successful print embodied some of the suggestions of our Commentator and portfolio members.

Photographic data: 4x5 Speed Graphic with Zetes Tensar 1/4.5 5/4" lens, 1/32 at 1/100 sec., diffused flash at camera. Taken on Super Pan Film B, developed in DK 50, area used for print 2"x2 1/4". Printed on Defender DL 3 developed in 55-D. Shadows on final print were lightened locally with Farmer's Reducer. The first print took about three hours of careful reduction. Of course, as succeeding prints were made this time was cut.

We have a large collection of pictures of this puppy as I shot her time and time again from the time we received her at the tender and tiny age of one month. At the time this particular picture was taken, other negatives were blurred by the dog's fast movements and therefore were discarded. Due to a defective flashbulb, this one is extremely thin and was almost thrown away, but fortunately was saved to see what could be done with it. For the Scotch in me that saved it I've been thankful ever since.

But with all the joy in this award, there comes a touch of sadness; for in May 1948, our faithful, understanding little Nippy died bravely and tragically in the woods at Willow Creek. And that is one reason that I hoped, if any print of mine were to achieve success, it would be this one of her.

Notes from the Notebooks

The voting that has been going on for some time in regard to maximum print size has brought forth many interesting discussions on the subject of print size and salons. Rowena Brownell, APSA, Commentator of Pictorial Portfolio No. 43, has a Notebook entry which we feel will be of general interest so it is our "quote" for this month. Mrs. Brownell says, in part:

Perhaps now is the time when I should say how much satisfaction the portfolio gives me, too. This is a fine group of prints.

It never fails to amaze me what can be accomplished by interest—and hard work. Naturally, effort is part of it, for take away the feeling of earned achievement, and the fine glow goes with it.

As to size of prints, the decision for larger prints shows that you consider salons as your print outlet. The proportion of salons' acceptance for large prints is tremendous—11x14 is small now. Whether or not this will change is guess work. Usually trends swing back and forth—large and small—sharp and soft focus—spot and natural light. There is usually one particular size print which best represents each negative.

Because a negative will "blow up" without too many miseries of grain and blemishes does not make it a fine picture, nor even that there has not been a definite loss of quality. Some pictures are better expressed in large areas of paper. Simple masses—gradations strong enough to bind those values together in a way that is esthetically satisfying but not too subtle to carry at a distance.

It is not to my mind which is better—large or small—there is a radical difference of approach, purpose and technique.

The main idea is to make up your mind what size you want and how to get it when you take the picture. The closer connection between the first planning of the picture through the exposure, and development of the negative and the final making of the print—the stronger and more convincing the result can be.

There are many factors in favor of small prints. If you make ten similar prints probably one will be the best—that also is true of etchings and other processes. It is only by trying to live up to the best print and by putting the rest in the wastebasket that one progresses. Large printing paper is expensive and many an exhibitor has sent out a 16x20 print of a quality which he would have unhesitatingly destroyed had it been smaller.

Critical appreciation is probably more often given medium size prints on a wall, in a portfolio, or a book than would be possible hung in a salon.

PRINT TITLE _____
NAME _____
ADDRESS _____



PICTORIAL DIVISION

THE PHOTOGRAPHIC SOCIETY OF AMERICA

Salon Print Stickers, like the cut, are available for the use of Pictorial Division members. These labels were designed by Doris Martha Weber, APSA, Director of Art, for this particular purpose, and they are now ready for distribution. They show the Pictorial Division Eagle, and have spaces for print title, number, and other information, and are 4 1/4 by 5 1/2 inches in size.

To secure a supply of these for your own use, just send a 3¢ stamp to Lewis T. Reed, Secretary-Treasurer, 7836 Luella Avenue, Chicago 49, Illinois, and you will receive them by return mail.

HIGHLIGHTS FROM

Portrait Portfolios

PAUL J. WOLFE, Associate Editor

There is still plenty of room for new members in our Portrait Portfolios. Send card or letter to me at 124 E. Jefferson St., Butler, Pa., for information.

No. 12 Portfolio welcomes as new secretary, Fernald S. Stickney, 34 McKinley Ave., West Caldwell, N. J.

Wisdom words from Edith Royky, Commentator for No. 4: "I have a notebook in which I have been putting down suggestions, formulas, tricks of the trade, etc., from all the different notebooks in various portfolios. I have a wealth of material and each suggestion carries a credit line to the person who gave the information."

Elizabeth Johnson of No. 4 puts her camera to work in unique methods. For example: "About every three weeks I cannot get my ironing done, so a lady will always come in and do it for me and I pay her with photos of her daughter . . . I pay for my daughter's transportation from school every day by photographing the children of the driver . . . My schedule allows for no sewing, so a seamstress does all this in exchange for photographs of her little son."

"I have trouble keeping you all straight," says Robert R. Maxwell of No. 4, "and I suggest that each one of us enclose 15

pictures of ourselves, one for each member of the portfolio." What is that time worn quip about I've-got-rats-in-my-cellar-give-me-a-photo-of-you thing?

Congratulations to Portrait Portfolio member Charles H. Tipple, of No. 1, for his Third Prize winning print in the 30th "American Photography" Annual Competition. Congratulations, too, to honorable mention winners Edith Royky and Doris Martha Weber.

Welcome Dorothy E. Kilmer, 31 Chestnut St., Gloversville, N. Y., as new secretary of No. 2.

Cecil Berfield, Iowa Falls, Iowa, sends in an excellent suggestion to speed up our portfolios. From now on the outside of each case will bear the notice: "Railway Express Agent—If not delivered in three days look on the inside cover for further shipping directions." On the inside cover the secretary will paste a route sheet in the order the case is to travel. This will definitely eliminate the time lost when one of the members is on vacation, out of town or cannot pick up the case promptly. It will certainly speed up the portrait portfolios and perhaps we will reach that aim of three to four circuits a year.

Fred Archer, commentator for No. 2, inserted for the members a copy of his latest book, "Fred Archer on Portraiture." The chapter on posing the model is just about worth its weight in gold.

Fred Archer says in his comments: "Waxing is usually used to cover the dull spots left by etching on a print." He advises C. F. Swenson: "It helps on children's portraits when they are dressed in light clothes to have a light background. This has a tendency to give a little more of the vivaciousness of a child rather than using the dark background which spreads a feeling of gloom." And Cy Coleman: "Why use poppy oil or varnish on a print? There are too many good grades of smooth or glossy papers on the market to have to resort to this method of bringing back brilliance into the print which should be put there by the printing time and the developing time of the print."

He writes Cecil Berfield: "A pure white background has no character and should be modulated if possible while taking the picture, or the corners slightly dodged in order to darken the edges of the print, and in this dodging I mean *slightly*, with an even blend from center to edge, gradually getting darker so that we do not have the usual black halo effect of bad dodging."

And Fred Archer advises Ed J. McNabb: "When working with small cameras, especially with women, do not get too close to the subject as distortion creeps in. The near shoulder may become greatly exaggerated in size and give a massive feeling, losing some of the femininity that we should have." To D. M. Bannister he comments: "If for speed of exposure we have to let anything go out of focus, let's let the part beyond the point of interest (the face) fall off. Never let the nose or the front part of the face go soft. In that way, the face loses all character and becomes just a mass of soft putty-like substance."

News of the Pictorial Division

CHARLOTTE KESSLER, Associate Editor

Star Awards

Remember, in the days when we were most gullible, we half believed those funsters who told us that birds could be caught by sprinkling salt on their tails? The PSA has gone even further for it has made it possible for the stars to be "pulled down" through the use of silver salts and a few other ingredients.

We have seen no "salted" birds but the Society has been giving us actual proof of the star experiment—witness the names which are being added this month to that ever lengthening list of amateurs who have snared star awards:

New 1-Star Exhibitors

Norman Partington, Natal, S. A.
Lawrence M. Spaven, Rochester, N. Y.
Roy J. Bohlen, So. Orange, N. J.

New 2-Star Exhibitors

David Darvas, APSA, Cleveland, Ohio
Trond Hedstrom, Helsingfors, Finland

Advanced from 1-Star to 2-Star

Morton Strauss, New York, N. Y.

Advanced from 2-Star to 3-Star

Lewis T. Reed, Chicago, Ill.

Boyd T. Hindman, DeWitt, N. Y.

Snapshots and Pictorial Prints

You have heard photographers analyzing a picture make the statement "It's just another snapshot." Such a statement is not considered to be a very complimentary appraisal of another photographer's work. If the picture was intended as a pictorial it has certainly failed in its attempt.

At certain times and places a photographer may only want to make "snapshots" for the purpose of recording activities of family and friends for their enjoyment. Copies can be neatly cemented in the album and such pictures are invaluable to bring back memories of pleasant associations and events of the past. However, the photographer should realize that "snapshots" are not acceptable pictures for club competitions, contests, exhibitions or salons.

If you are interested in improving your pictorial approach to photography and want to make better pictures which can be appreciated by many people through exhibitions and club contests, the PD will help you through its Personalized Print Analysis Service. Many members of the PD have utilized this service and some have sent their pictures in with recommended improvements for a second analysis. You can have this service without charge by simply following a few simple rules:

Prints should be 5x7 to 8x10, sent first class with return mailing label and first class return postage included. On the back of each print should be the name and address of the maker, title of the picture, technical data and pertinent details, including a brief statement of the idea or purpose behind the picture, and the purpose for which it was taken (club contests, salons, etc.). To help the analyst do the best possible job, a contact print of the entire negative should be attached to the back of the print.

Prints should be sent to J. Elwood Armstrong, APSA, Director, Personalized Print Analysis, 17402 Monica, Detroit 21, Michigan. A comprehensive analysis and appropriate comments will be returned with each print.



LYNNE PASCHALL, Associate Editor

I know of a camera club that has fallen into a rut. The rut is both deep and narrow, but strange to say, the members themselves are quite unaware of the fact. The slipping process has been so gradual and so easy that everything about the club seems proper and as it should be. One of the reasons for this strange state of affairs is that the members are all busy men, very busy. The time that they devote to camera club activities has to be stolen from the hours that should be given to their business or professional duties.

But many of these faithful servants learned, long ago, that making an occasional print does something for the morale that fully compensates for the time squandered so they stay on. Many of them have belonged to the club for years, and even if some have not brought in prints for a long time, there is still no indication that interest is lacking or that ambition is dead. Everyone of them hopes to make a masterpiece some day when the right picture idea takes form. In the meantime their art appreciation is lapsing into a kind of stereotyped criticism.

Every month, two or three dutiful members carry in pictures to keep things going, and this part of the program is getting to be an old story. As soon as a print is put up, the spectators try to guess who made it, and they are usually right.

Yes, I have been describing your camera club, and my club, and a thousand other clubs across the land. But I wouldn't give up my membership for the world, would you?

If you are an officer this year, or are serving on a program committee, perhaps you would like to have some new ideas and suggestions, and at the risk of being thought a persistent advertiser, I am going to re-

peat here some of the sources of program material that PSA has to offer its member clubs. This is advertising of a sort, to be sure, but nobody profits thereby except the club that takes advantage of it.

How would you like to have a salon of fine prints to discuss at some meeting? Wouldn't you enjoy looking for faults in the work of such masters as Carl Mansfield, or John Hogan, or Edward Crossett? There would be many things to admire too. Maybe some member would be inspired to make that print that he has been dreaming about. There are nine or more separate shows in the *American Exhibits* and any one of them may be had for the low service charge of two dollars. Write to Fred W. Fix, Jr., for the present list and arrange a convenient date.

Or maybe you are curious to see what one person thought were the outstanding prints in the many portfolios that came to her attention. The late Frances Robson made such a collection. Write to Dennis R. Anderson, and tell him your wishes. There are several sets available and the only cost is the express charge.

If there is a rival club in your city, or anywhere within easy reach, you can exchange a salon with it. Take your pictures to the other club some night and see what they have to say about them. Next month let them bring their pictures to your meeting. Both clubs will enjoy these meetings immensely and want to do it again next year.

If there is no such club in your vicinity, write to William R. Hutchinson, and arrange to enter one of the *Camera Club Print Circuits*. The service charge is only one dollar. Your club needs only three prints to get into a circuit and if you don't select the best ones it is your own fault. Eight clubs make a circuit and after the show has been around to all of them, the prints will be returned to the makers. With each print will be all the comments made on it, not only by the clubs visited, but by an expert commentator. That ought to furnish material for still another club meeting.

After one of these programs has furnished an enjoyable evening for your club, it would be nice to write to the director of the service and tell him all about it. He will appreciate knowing that his work has been worth while.

The *Portfolio Camera Clubs* are reporting interesting times. Eight people who belong to portfolios can form a club and need little more in the way of program material to have snappy meetings. Write to Sten T. Anderson, Director, for further details.

Are you having a public exhibition of prints this winter? You should, by all means. Nothing attracts more favorable attention to a club than an exhibition of its work. At the end of the season, a print-of-the-year contest is in order within the club. In such cases you will need some unbiased judging, and it is not too early to get in touch with the *PSA Judging Service*. No charge is made to member clubs, the only expenses are for the transportation of prints to the judge. Write W. Dovel LeSage, APSA.

PSA JOURNAL, Vol. 16, Dec. 1950

PSA TALKS

The Recorded Lecture Program

DR. C. F. COCHRAN, Associate Editor

If you are a regular reader of "The Folio," you know about the Society's Talks by now. By way of a brief review let me state the scope of this new program.

The Recorded Lecture Program offers a series of lectures which are recorded on tape and illustrated by slides. The tape is standard 3 1/4 inches per second and can be played on most home type tape recorders. If a recorder is not available among the membership of the club, your local dealer will probably cooperate to the extent of loaning and probably operating the recorder in exchange for the opportunity of demonstrating his merchandise. In most instances the lectures have been made on a regular Revere Tape Recorder.

The slides are the ordinary 35mm double frame type similar to your 35mm color slides but are, so far, black and white. A slide projector should be available to most clubs.

Two regular and one special recorded lecture constituted last month's release. The regular ones were No. 1 and No. 2. Both are an analysis of recognized salon prints by competent critics. The first was by Ragnar Hedenvall, APSA, and No. 2 is delivered by Morris Gurrie. In both cases the selections were made from accepted prints which were in the Sixth Chicago International. The two sets of prints are as different as the approaches of the two men giving the talks and both are packed with information and offer a revealing explanation of why these prints are good. The implication is obvious; if you learn what constitutes a good print you should be better able to produce good prints.

The Special Lecture is the lecture by P. H. Oelmann on "The Photography of the Nude." The tape is of the same type as the other lectures except that it consists of two reels and lasts about an hour and three quarters. There is some variation in the slides from the other talks. These slides are done in Ansco color in order to display the toning and they are a little larger in size. The slides are 2 3/4 x 2 3/4 and require a projector such as used to project 2 3/4 square transparencies. The beautiful pictures and the lecture by the acknowledged master of nude photography should make this an extremely worthwhile program for your club.

This may be a good place to mention that because of the special nature of this program, "The Photography of the Nude," the cost to your club will be a little higher. Mr. Oelmann's lecture may be obtained for \$10.00. A deposit of \$25.00 is asked and the difference will be returned upon safe return of the tape and slides. Also it must be pointed out that this program is not available from the Director of the Recorded Lecture Program but must be ordered directly from Mr. Oelmann at 311 Main Street, Cincinnati 2, Ohio.

Correction and Alteration

In the material for this column in the November issue there was, among other things, an error. There was also a statement of policy which has been changed.

Let us consider the error first. The variable service charge which is made for the Recorded Lectures was properly stated but the deposit required was misstated. The charges are \$6.50 per lecture for clubs which are members of both PSA and the Pictorial Division, \$7.50 for PSA member clubs which are not affiliated with the Pictorial Division, and a flat charge of \$10.00 for clubs, organizations, or groups which have no PSA affiliation. The error was in the amount of deposit required. The deposit, to insure safe return of the tape and the slides, is \$25.00 but it is NOT \$25.00 in addition to the service charge. A simple \$25.00 remittance will bring a lecture and the difference between the service charge and the deposit will be refunded upon safe return of the tape and slides.

Stated simply it is this: send \$25.00 for each lecture you want and your change will come back to you when we get it back.

And now for the policy change. The lectures will be mailed to you via Parcel Post rather than by express. You will return them by Parcel Post also. After some consideration it was concluded that prepaid Parcel Post would be more convenient for most clubs and certainly more convenient for this office. A sizeable saving in cost will be effected too as this is a cheaper method of shipping in practically every case.

In a way the above two changes might be considered good news. They amount, in effect, to a reduction in cost and initial outlay.

Outdoor Photography by D. Ward Pease, FPSA

A worthy addition to the two lectures announced last month is the December release, *Outdoor Photography*. The speaker, D. Ward Pease, FPSA, is well known as a speaker, a lecturer, and a judge. His column in "Popular Photography" and his articles in various other photographic magazines are widely read.

Now your club can have Mr. Pease for a program on a date of your own choosing by means of the PSA Talks.

From a wide selection of prints Mr. Pease offers instruction and advice which will be of benefit to practically any photographer, from the lowliest tyro to the seasoned pictorialist. The opportunity of merely viewing the fine examples of outdoor photography included in this lecture would make it well worth the time and effort. The program is crammed with much specific information on just plain "how to go out and take a picture." More than this it is rich in the philosophy of pictures in general and presents many stimulating suggestions on the procedure of getting ideas. Once we attain a modicum of photographic skill the big problem which confronts us is ideas; what should we photograph? Here you may learn, not so

much the ideas themselves, but how to arrive at the ideas.

Even if you are one of those folks who "never take any outdoor pictures" you can profit from this program.

Coming Salons Agreeing to Follow PSA Recommendations

NOTE: M—monochrome prints, C—color prints, T—color transparencies, SS—stereo slides, L—monochrome slides, A—architectural prints, S—scientific or nature prints. Entry fee is \$1.00 in each class unless otherwise specified. Recognition: The monochrome portions of salons listed have Pictorial Division approval. Check salon list of appropriate division for recognition of other sections.

- Canberra (M) Exhibited Jan 24-31. Canberra Photographic Society, Canberra, Australia.
- Springfield (M) Exhibited Jan 2-11 at Geo. Walter Vincent Smith Art Museum, Springfield 5, Mass.
- Cuba (M,T) Exhibited Dec 15-Jan 15 in club gallery. Club Fotografico de Cuba, O'Reilly y Compostela, altos, Havana, Cuba.
- Des Moines (M,C) Exhibited Jan 1-21 at YMCA and Art Center, Des Moines, Iowa.
- Detroit (M,T) Exhibited Jan 14 to Feb 4 at Detroit Institute of Arts.
- Wilmington (M) Closes Jan 14. Exhibited Feb 4-25 at Delaware Art Center. Data: M. M. Wainwright, P. O. Box 401, Wilmington, Delaware.
- Minneapolis (M,C) Closes Jan 15. Exhibited Feb 4-24 at Minneapolis Public Library. Data: Warren Anderson, 123 S. 7th St., Minneapolis, Minn.
- Winnipeg (M,C) Closes Jan 20. Exhibited Eastman Street Feb 17-Mar 3. One entry fee for one or both classes. Data: H. E. Nicholas, 118 Lawndale Ave., Norwood, Manitoba, Canada.
- Circle of Confusion (M,T) Closes Jan 31. Exhibited Feb 11-25 at Art Gallery. Data: John S. Goodwin, 2028 Howard St., Whittier, Calif.
- Great Falls (M) Closes Feb 10. Exhibited Mar 1-11 at Service Men's Center. Data: Miss Elvira Cahalan, Box 1997, Great Falls, Montana.
- Philadelphia (M,T) Closes Feb 10. Exhibited Mar 3-25 at Free Library. Data: John A. Adams, 546 Putnam Road, Marion Station, Penna.
- Montreal (M) Closes Feb 13. Exhibited Mar 9-28 at Museum of Fine Arts. Data: Walter F. Wood, 500 Dominion Square Bldg., Montreal, P. Q., Canada.
- Pittsburgh (M,T) M closes Feb 21; T Feb 25. Exhibited Mar 16-Apr 15 at Carnegie Art Galleries. Data: Karl S. Leach, 92 Estella Ave., Pittsburgh 11, Pa.
- Port Colborne (M) Closes Mar 3. Exhibited Mar 18-31 at the club. Data: Dr. G. B. White, 34 Clarence St., Port Colborne, Ont., Canada.
- Reading (M,T) Closes Mar 12. Exhibited Mar 25-Apr 22 at Public Museum and Art Gallery. Data: August J. Heidrich, Central YMCA, Reading, Pa.
- Seattle (M) Closes Mar 15. Exhibited Apr 4-May 6 at Art Museum. Data: Ray B. Pollard, 4063 56 Ave. S. W., Seattle 6, Wash.
- Newport News (M) Closes Mar 31. Exhibited during April at Mariners Museum. Data: T. F. Holt, 1016 Ferguson Ave., Newport News, Va.

Other Overseas Salons

- Lincoln (M,A,S,T,L) Exhibited Dec 9-Jan 9 at Usher Art Gallery, Lincoln, England.
- Lucknow (M,C,T) Exhibited Feb-Mar 1951. U. P. Amateur Photographic Assn., 10 Cantonment Rd., Lucknow, India.
- Birmingham (M,L,T) Closes Jan 13. Exhibited Feb 10-24 at Royal Society of Artists Galleries. Data: E. H. Hudson, 129 City Road, Birmingham 16, England.
- London and Cripplegate (M,T,L) Closes Jan 29. Exhibited Mar 12-17 at the Cripplegate Institute. Data: City of London & Cripplegate Photographic Society, 145 Thanet House, Thanet St., London, WC 1, England.
- Cologne (M) Exhibited Apr 20-29 in Exhibition Halls of Cologne. Data: Photokina 1951, Messe-und Ausstellung-Geo. m. b. H. Koln, Cologne-Deutz, Germany.



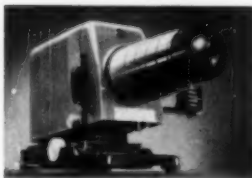
Show, complete

Each Kodaslide Table Viewer is a complete "projection package"—self-contained, ready for use any time. The famous Model A, above, \$95, combines projector, slide changer, and screen, in a handsomely styled unit that graces any home or office. The popular new Model 4X, at right, only \$47.50, yields a screen image almost as large as that of the Model A. Both have fully corrected, *Lumenized* optics, and the unique Day-View screens that permit full-quality color showings even in fully lighted rooms. Let your Kodak dealer demonstrate them to you.



Show, big as life

For dramatic, large-image projection of top quality, at home or in the lecture hall, pick a Kodaslide Projector. The three pictured here offer a price range to fit every budget, a power range to fit any problem.



In screen brilliance and color purity, these projectors give outstanding performance. Kodaslide Projector, Model 2A, above, with 5-inch *Lumenized* $f/3.5$ lens, \$49.50. Kodaslide Projector, Model 1A, at right, with 4-inch $f/3.5$ *Lumenized* lens, is only \$29.50.



Aptly named, the great Kodaslide Projector, Master Model (above), has no peer in either efficiency or versatility. Its brilliantly engineered optical system extracts top returns—on the screen, where brilliance counts—from lamps of any wattage, 300 to 1000. With 1000-watt lamp and 5-inch $f/2.3$ lens, it delivers 1720 lumens to the screen. It handles home shows as readily as exhibitions in the largest halls; a choice of five superb Kodak Projection Ektar and Ektanon Lenses, all *Lumenized*, 5-inch to 11-inch, accommodates long or short throws. Blower-cooled, quiet, rugged, and smart in design. \$165 up, depending on the lens you choose.

Prices are list, and subject to change without notice.

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CHURCH

H. J. Mahlenbrock

The seventh judging of the Print of the Month Contest was held in Chicago with the following results announced by judges Rachel Osgood, Irene Reiser, Anne Pilger Dewey, and Angel de Moya.

Beginners Group, Pictorial Class

- 1st—H. J. Mahlenbrock, Teaneck, N. J.
"Church"
2nd—Dr. S. Wayne Smith, Salt Lake City, Utah. "Scene"

Beginners Group, Nature Class

- 1st—Charles J. Perry, El Paso, Texas.
"Survival"
2nd—John H. Robertson, Somerville, Mass.
"Days End"

Beginners Group, Action Class

- 1st—Larry D. Hanson, Minneapolis, Minn.
"Rough Water"
2nd—S. M. Stelson, Durham, N. C. "Going Down"

Advanced Group, Pictorial Class

- 1st—Arnold Kidson, Middleshrough, England. "The Dog"
2nd—Gilbert H. C. Lum, Honolulu, Hawaii.
"Sunlit Pattern"

Oct. Print of the Month Contest



BLITZEN J. Elwood Armstrong, APSA



THE DOG

Arnold Kidson

Advanced Group, Nature Class

- 1st—Louis A. Puggard, Detroit, Mich.
"Why Don't You Go to Bed Nights"
2nd—Clifford B. Paul, Moline, Illinois.
"Dogwood Blossoms"

Advanced Group, Action Class

- 1st—J. Elwood Armstrong, Detroit, Mich.
"Blitzen"
2nd—Manuel Ampudia, Mexico, D. F., Mexico. "Dos Campeones"

The Print Contest is judged in a different city each month, although all entries are to be sent to PSA Headquarters as in the past. The schedule of judging and the individual in charge follows:

| Month | City | Judges and Judging Arrangements |
|-----------|--------------|---------------------------------|
| Jan. 1951 | Boston | L. Whitney Standish |
| Feb. | Cincinnati | P. H. Oelman |
| Mar. | Baltimore | Ernest C. North |
| April | Pittsburgh | O. E. Romig |
| May | Detroit | Dr. C. J. Marinus |
| June | Cleveland | Doris Martha Weber |
| July | Atlanta | C. A. Luce |
| August | Philadelphia | Charles Heller |



ROUGH WATER

L. D. Hanson



DOS COMPEONES

Manuel Ampudia



SURVIVAL

Charles J. Perry

PSA Journal

VOLUME 16

NUMBERS 1-12



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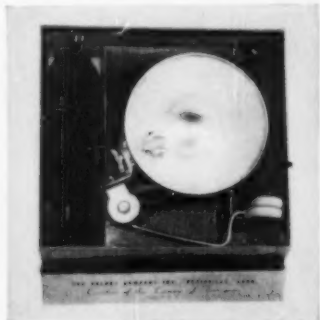
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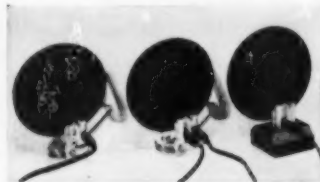
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